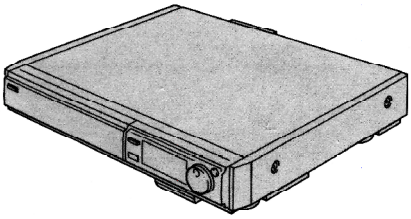
ORDER NO. VRD9202M107

Service Manual

Video Cassette Recorder

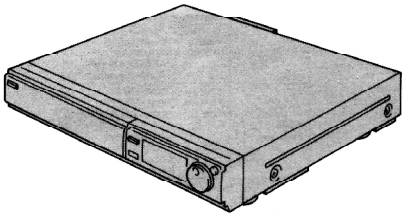


NV-FS200EG

Panasonic S-VHS VHS PAL 625

Hi-Fi HQ

NV-FS200EG
NV-FS88EG



NV-FS88EG

SPECIFICATIONS\ТЕХНИЧЕСКИЕ ХАРАКТЕРИСТИКИ
SERVICE INFORMATION\СЕРВИСНАЯ ИНФОРМАЦИЯ
GENERAL DESCRIPTION\ОБЩЕЕ ОПИСАНИЕ
ADJUSTMENT PROCEDURES\МЕТОДИКА РЕГУЛИРОВКИ
- Disassembly method\метод разборки
- Mechanical adjustment procedures\методика механической настройки
- Location of test point and controls\расположение контрольных точек и органов управления
- Circuit board layout\размещение монтажных плат
- Electrical adjustment procedures\методика электрической настройки

BLOCK DIAGRAMS\БЛОК-СХЕМЫ
- System control & servo block diagram\блок-схема систем управления и сервопривода
- Luminance\chrominance block diagram\блок-схема каналов яркости\цветности
- TBC block diagram\блок-схема корректора временной базы
- HI-FI audio block diagram\блок-схема HI-FI аудиоусилителя

SCHEMATIC DIAGRAMS\ПРИНЦИПИАЛЬНЫЕ СХЕМЫ
- Power schematic diagram\принципиальная схема электропитания
- System control and servo section in main schematic diagram\принципиальная схема системы управления и сервопривода (основная)
- Luminance\chrominance section in main schematic diagram\принципиальная схема каналов яркости\цветности (основная)
- Audio section in main schematic diagram\принципиальная схема аудиоусилителя (основная)
- Servo pack schematic diagram\принципиальная схема сервопривода (дополнительная)
- Luminance\chrominance pack schematic diagram\принципиальная схема каналов яркости\цветности (дополнительная)
- Sub luminance\chrominance pack schematic diagram\принципиальная схема блока каналов яркости\цветности (дополнительная)
- HI-FI audio pack schematic diagram\принципиальная схема модуля блока HI-FI
- Input\output pack schematic diagram\принципиальная схема платы ввода\вывода
- TBC schematic diagram (NV-FS200EG)\принципиальная схема корректора временной базы (NV-FS200EG)
- Head AMP schematic diagram\принципиальная схема усилителя видеоголовок
- VPS pack schematic diagram\принципиальная схема блока ВПС
- Timer & VR schematic diagram\принципиальная схема платы управления и таймера
- TV demodulator pack schematic diagram\принципиальная схема блока ТВ демодулятора
- Decoder pack schematic diagram\принципиальная схема блока декодера

EXPLODED VIEWS & PARTS LIST\СБОРОЧНЫЕ ЧЕРТЕЖИ И СПИСОК ЗАПАСНЫХ ЧАСТЕЙ
- Exploded views and mechanical replacement parts list\сборочные чертежи и список механических запасных частей
  - Chassis parts section (1)\секция шасси (1)
  - Chassis parts section (2)\секция шасси (2)
  - Cassette up mechanism section\секция механизма кассетоприемника
  - Packing parts section\упаковка
  - Casing parts section\корпус
- Electrical replacement parts list\список электрических запасных частей

Panasonic

SPECIFICATIONS

ITEM	SPECIFICATION	
POWER	SOURCE: 220~240V 50/60Hz	
	CONSUMPTION: 41 watts (NV-FS200EG) 39 watts (NV-FS88EG)	
RECORDING SYSTEM	2 rotary heads, helical scanning system	
	PAL	
TV TUNER SYSTEM	Germany	VHF I: CHE2~CHE4 VHF III: CHS4~CHE12 VHF H: CHS11~CHS20 (PAL/SECAM B) 75Ω unbalanced UHF: CH21~CH69 (PAL/SECAM G) 75Ω unbalanced
	Italy	VHF I: CHA~CHH VHF III: CHS4~CHH2 VHF H: CHS11~CHS41 (PAL/SECAM B) 75Ω unbalanced UHF: CH21~CH69 (PAL/SECAM G) 75Ω unbalanced
	Other Countries	VHF I: CHE2~CHS3 VHF III: CHM1~CHE12 VHF H: CHU1~CHS41 (PAL/SECAM B) 75Ω unbalanced UHF: CH21~CH69 (PAL/SECAM G) 75Ω unbalanced
RF OUT SYSTEM	UHF: CH36±4 (PAL/SECAM G) 73^{+2}_{-3}dBμ, 75Ω terminated	
VIDEO	HEADS: 4 rotary heads 1 pair for SP recording, playback and trick play (L-R heads) 1 pair for LP recording, playback and trick play (L'-R' heads), 1 flying erase head	
	INPUT: EURO AV (AV1/AV2) Connectors (21pin) 1.0Vp-p, 75Ω terminated S-VIDEO IN (AV3/AV4: NV-FS200EG) Connectors (S4pin) Y: 1.0Vp-p, 75Ω unbalanced C: 0.3Vp-p, 75Ω unbalanced VIDEO IN (AV4: NV-FS200EG) Connector (Phono type) 1.0Vp-p, 75Ω terminated	

ITEM	SPECIFICATION
VIDEO	OUTPUT: EURO AV (AV1/AV2) Connectors (21pin) 1.0Vp-p, 75Ω terminated S-VIDEO OUT Connector (S4pin) Y: 1.0Vp-p, 75Ω unbalanced C: 0.3Vp-p, 75Ω unbalanced
AUDIO	HEAD: 1 Stationary head (Normal Audio) 2 rotary heads (Hi-Fi 2CH)
	INPUT: EURO AV (AV1/AV2) Connectors (21 pin) More than −6dBV (500mV), more than 10kΩ AUDIO IN (AV3/AV4: NV-FS200EG) Connectors (Phono type) More than −10dBV (316mV), more than 47kΩ MICROPHONE JACK −70dBV
	OUTPUT: EURO AV (AV1/AV2) Connectors (21 pin) −6dBV (500mV), Less than 1kΩ AUDIO OUT Connector (Phono type) −8dBV (400mV), Less than 1kΩ HEAD PHONE Jack −30dBV, 8Ω
	TRACK: 1 track (Normal-mono only) 2 channels (Hi-Fi Sound-Stereo)
TAPE FORMAT	S-VHS, VHS Cassette tape (Tape width 12.7mm)
TAPE SPEED	SP: 23.39mm/s LP: 11.695mm/s Record/Playback Time: SP: 4 hours with 240min. type tape LP: 8 hours with 240min. type tape FF/REW Time 2.5min. with 180min. type tape
DIMENSIONS	460(W)×109(H)×403(D)mm (NV-FS200EG) 430(W)×109(H)×403(D)mm (NV-FS88EG)
WEIGHT	8.0kg (NV-FS200EG) 7.5kg (NV-FS88EG)
STANDARD ACCESSORIES	1 pc. DIN-RF Cable 1 pc. Infra-red Remote Contoroller 1 pc. Audio Cables 1 pc. Digital Scanner (NV-FS200EG) 1 pc. Programme Sheet 1 pc. AC Mains Lead 1 pc. 4P Cable

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

1-4. SERVICING THE LUMINANCE & CHROMINANCE PACK C.B.A. AND THE SUB LUMINANCE & CHROMINANCE PACK C.B.A.

When servicing the luminance/chrominance pack C.B.A. and Sub luminance/chrominance pack C.B.A., connections of extension cables are necessary as shown below.

PART NO.	PART NAME	PCS	CONNECTION
VFK0807	9P EXTENSION CABLE	1	PS3001-PP3001
VFK0808	12P EXTENSION CABLE	2	PS3002-PP3002, PS3003-PP3003
VFK0678	18P EXTENSION CABLE	2	PS3011-PP3011, PS3012-PP3012

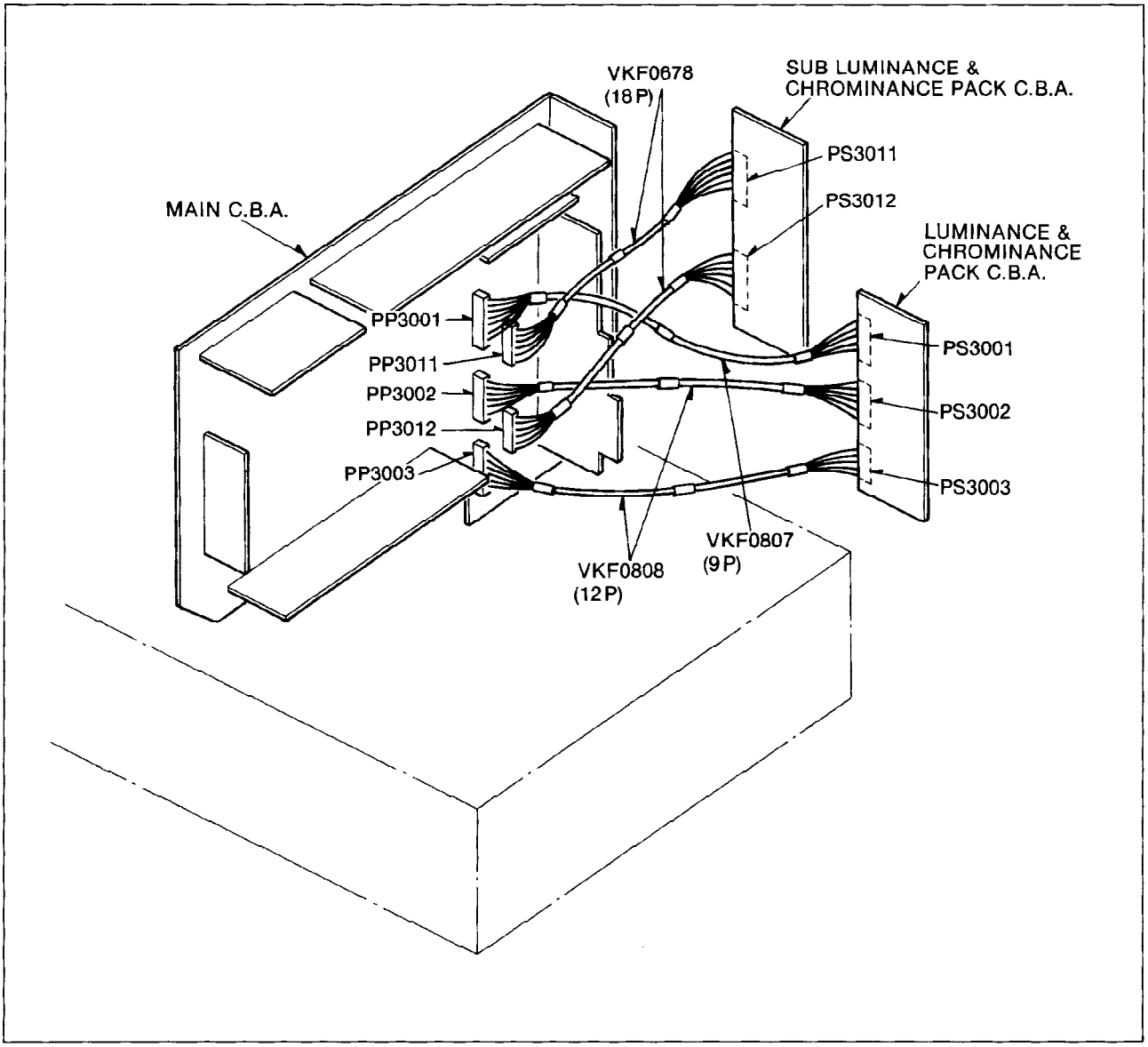


Fig. S1

SECTION 1
GENERAL DESCRIPTIONS

1-1. TECHNICAL INFORMATION

INITIALIZATION OF CHANNEL MEMORY IC (IC7503/M6M80021P)

When replace the channel memory IC (IC7503/M6M80021P), the memory IC should be initialized to keep formal specification.

Note:

1) It should be performed before tuner preset.
2) During initialization or after initialization within 1 second, do not stop the power source. (Do not disconnect AC cord)
3) Meaning of "INITIALIZATION" is to erase the "SKIP CH". In another to say the number of POSITION CH and DISPLAY CH to be same.

Method:

1) Press the CH UP/DOWN Button so that the Channel indicator "——".
2) Connect the Diode (MA165) to Pin 54 of IC7501 for Anode, Pin 35 of IC7501 for Cathode twice.
3) Channel indication disappears, and approximately 3 seconds later Channel indicator indicates "1".

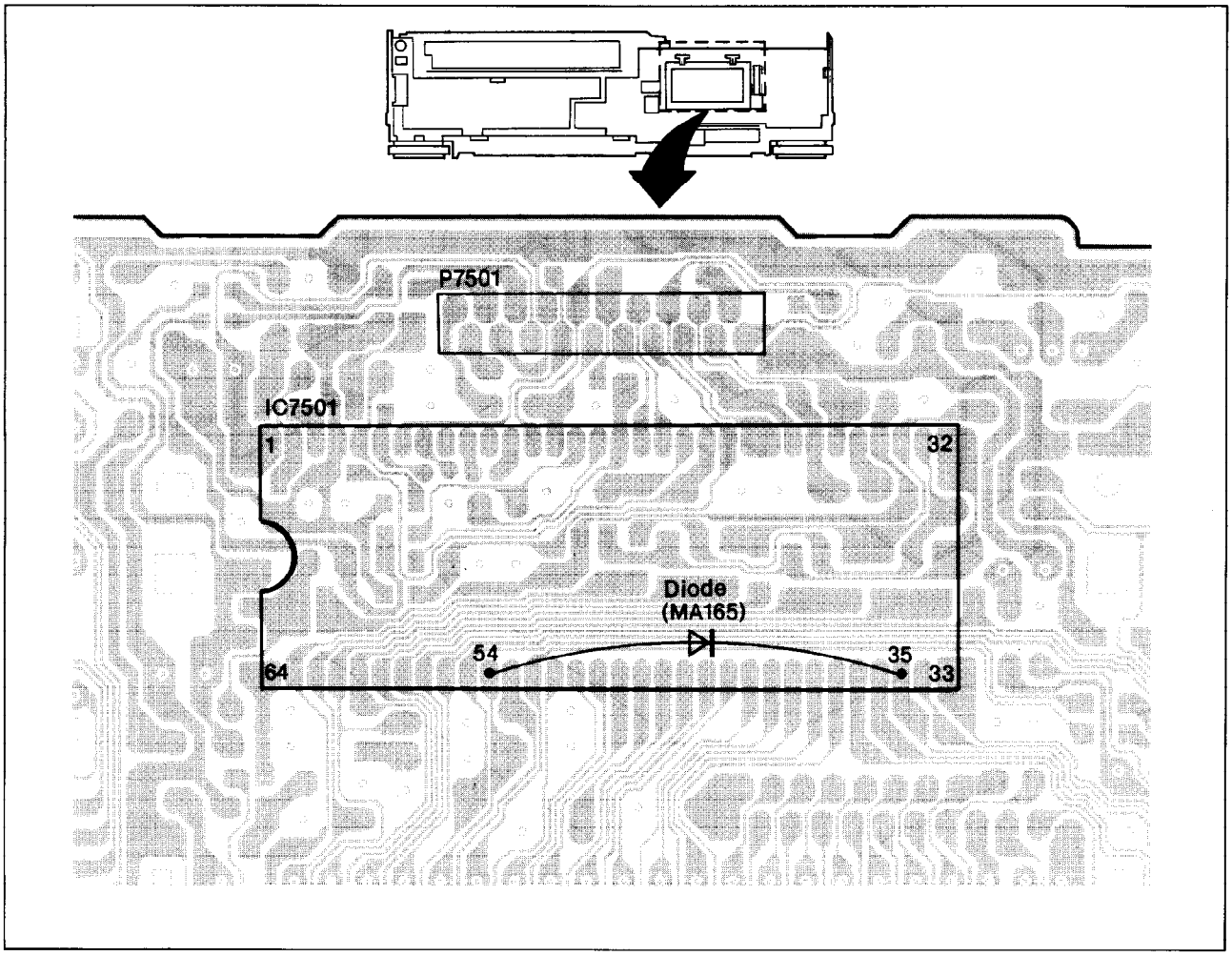


Fig. T1

SERVICE NOTE

When repairing without the top panel unit, Tape Select Switch must be set to the E195 position to prevent the malfunction of the Take-Up Photo Sensor.

SERVICE INFORMATION DISPLAY

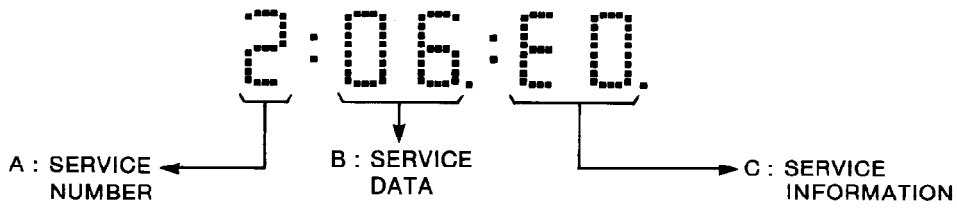
This unit can be confirmed the mode information which is detected by microprocessor IC6001 via multi function display.

Method:

1) Press "EJECT", "FF" and "REW" keys at the same time.
2) The counter of multi function display indicates microprocessor data approximately 1 minutes as shown in Fig.T2.

Note:

1) This mode can be entred even when Power off.
2) Also it can be displayed the data when connect jumper wire between TP6001 and TPGND. (Press "EJECT", "FF" and "REW" keys at the same time, increment service number)



A: SERVICE NUMBER	B: SERVICE DATA	
1	*0 (hex)	can not detect Take-up and Supply Photo
	*9 (hex)	detect Take-up Photo
	*U (hex)	detect Supply Photo
	*3 (hex)	detect Take-up and Supply Photo
2	02 (hex)	EJECT
	03 (hex)	CASSETTE IN
	04 (hex)	CASSETTE DOWN
	06 (hex)	STOP 1
	08 (hex)	STOP 2
	0U (hex)	PLAY
3	L* (hex)	STOP 1 → STOP 2
	4* (hex)	PLAY → CUE/REV
	3* (hex)	STOP 2 → PLAY
	2* (hex)	STOP 1 → FF/REW
	1* (hex)	During Unloading
5	1*** **** (bin)	capstan motor ON
	**** 1*** (bin)	capstan motor reverse direction
6	***1 **** (bin)	cylinder motor ON

C : SERVICE INFORMATION

E0 : Normal
E1 : Cylinder lock (STOP)
E2 : Reel lock (STOP)
E3 : Rev Motor lock
E4 : Mechanism lock during unloading
E5 : Mechanism lock during mode transfer to FF or REW
E6 : Mechanism lock during front unloading (Cassette out)
E9 : Serial data (IC6001 – IC7501) can not be transmitted.

Note:

1. "*" : No meaning
2. "hex": hexadecimal digit
3. "bin" : binary digit

ex.

bin	hex
0000	0
0001	1
⋮	⋮
1010	U
1110	L

Fig. T2

SECTION 2
ADJUSTMENT PROCEDURES

2-1. DISASSEMBLY METHOD

2-1-1. DISASSEMBLY FLOW CHART

This flow chart indicates disassembly steps of the cabinet parts and the circuit boards in order to find the necessary items for servicing.
When assembling, perform the steps in the reverse order.

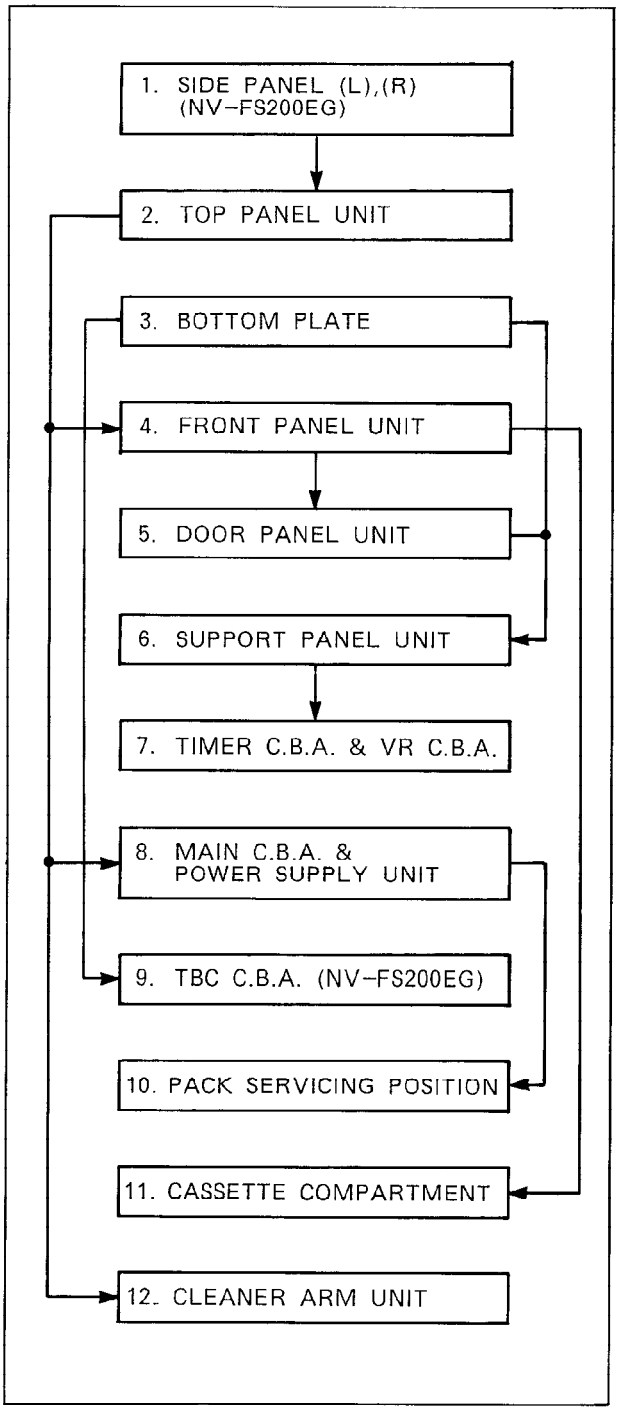

1. SIDE PANEL (L),(R) (NV-FS200EG)
2. TOP PANEL UNIT
3. BOTTOM PLATE
4. FRONT PANEL UNIT
5. DOOR PANEL UNIT
6. SUPPORT PANEL UNIT
7. TIMER C.B.A. & VR C.B.A.
8. MAIN C.B.A. & POWER SUPPLY UNIT
9. TBC C.B.A. (NV-FS200EG)
10. PACK SERVICING POSITION
11. CASSETTE COMPARTMENT
12. CLEANER ARM UNIT

Fig. D1

2-1-2. DETAIL OF DISASSEMBLY METHOD

1. REMOVAL OF THE SIDE PANEL (L),(R) (NV-FS200EG)

Remove.....4 Screws(A)

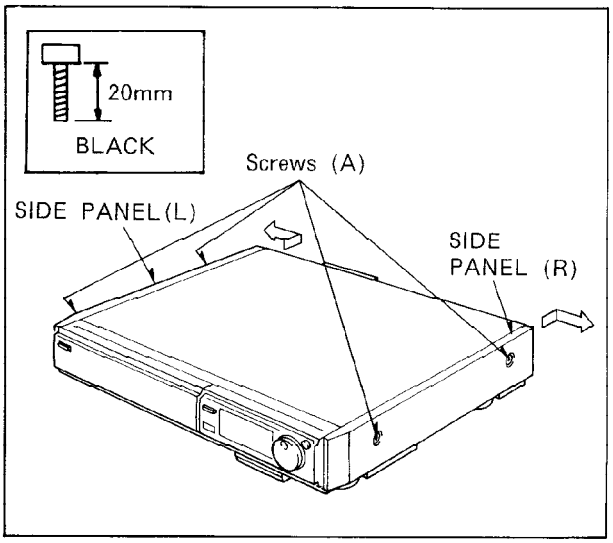


Fig. D2

2. REMOVAL OF THE TOP PANEL UNIT

Remove.....4 Screws(B)

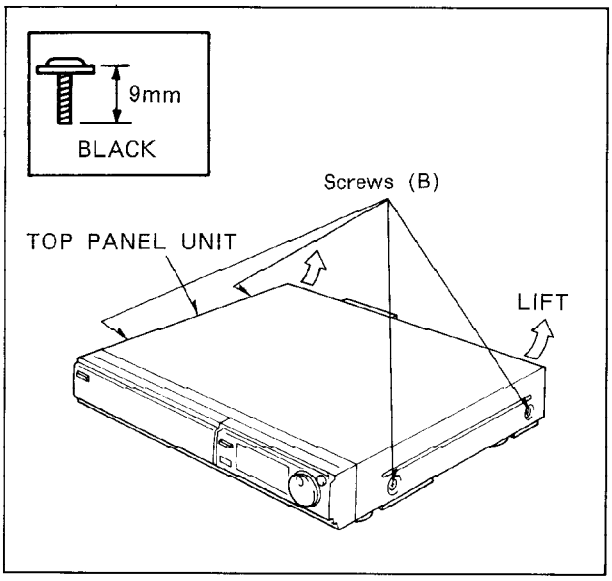


Fig. D3

3. REMOVAL OF THE BOTTOM PLATE

Remove.....9 Screws(C)

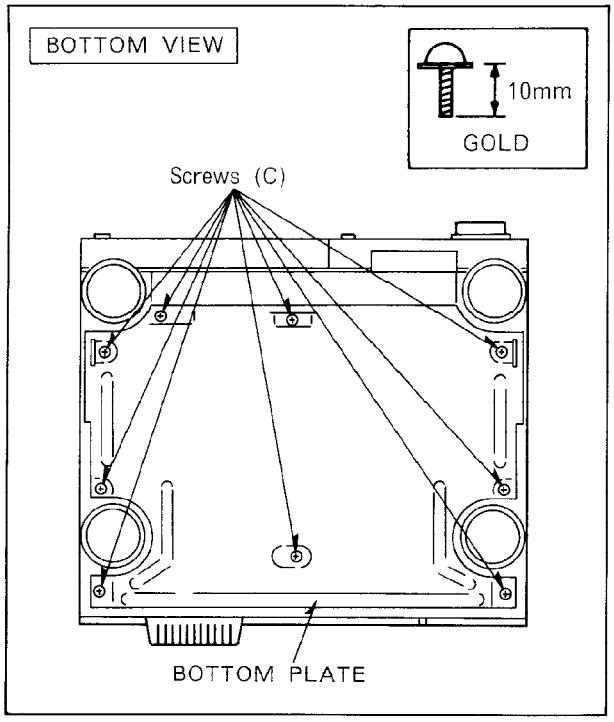


Fig. D4

4. REMOVAL OF THE FRONT PANEL UNIT

Remove.....Screw(D)
Unlock.....7 Tabs(E)
(DOOR PANEL.....OPEN)

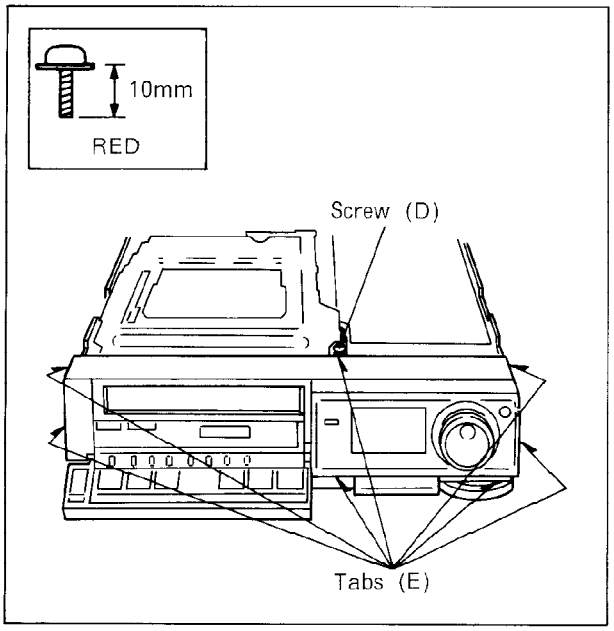


Fig. D5

5. REMOVAL OF THE DOOR PANEL UNIT

Remove.....2 Screws(F)
Disconnect.....2 Connectors(G)

6. REMOVAL OF THE SUPPORT PANEL UNIT

Remove.....3 Screws(H)
Unlock.....3 Tabs(I)
Remove.....Front Jack Cover(NV-FS200EG)

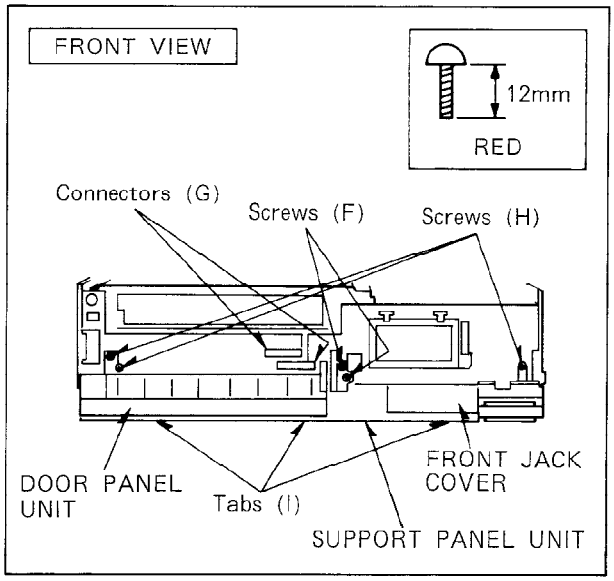


Fig. D6

7. REMOVAL OF THE TIMER C.B.A. & VR C.B.A.

REMOVAL OF THE TIMER C.B.A.

Remove.....Screw(J)
Unlock.....2 Tabs(K)

REMOVAL OF THE VR C.B.A.

Remove.....Screw(L)
Unlock.....2 Tabs(M)

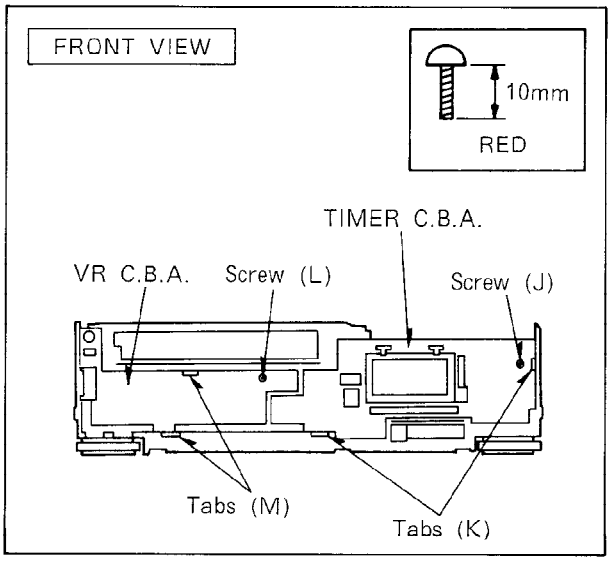


Fig. D7

8. REMOVAL OF THE MAIN C.B.A. & POWER SUPPLY UNIT

REMOVAL OF THE MAIN C.B.A.

Remove.....Screw(N)
Remove.....3 Screws(O)
Remove.....3 Screws(P)

REMOVAL OF THE POWER SUPPLY UNIT

Remove.....2 Screws(Q)
Remove.....Screw(R)
Remove.....2 Screws(S) and Heat Sink Cover
Remove.....Screw(T) and Heat Sink

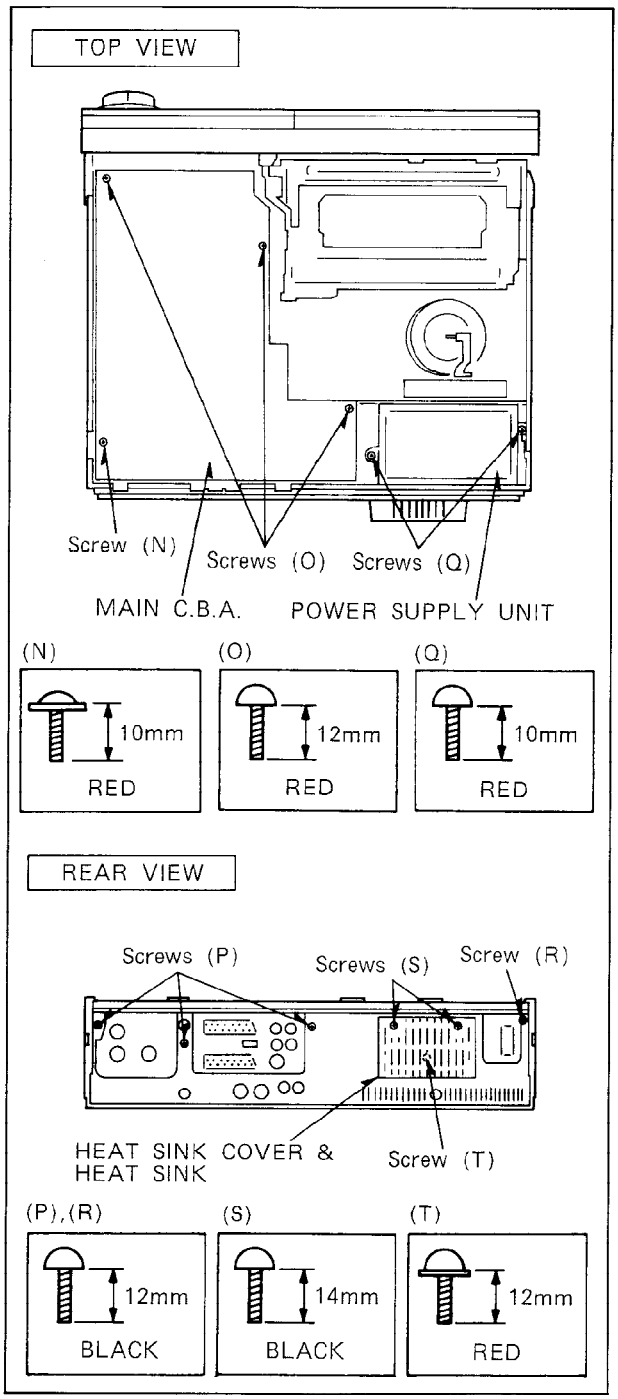


Fig. D8

9. REMOVAL OF THE TBC C.B.A. (NV-FS200EG)

Remove.....4 Screws(U)

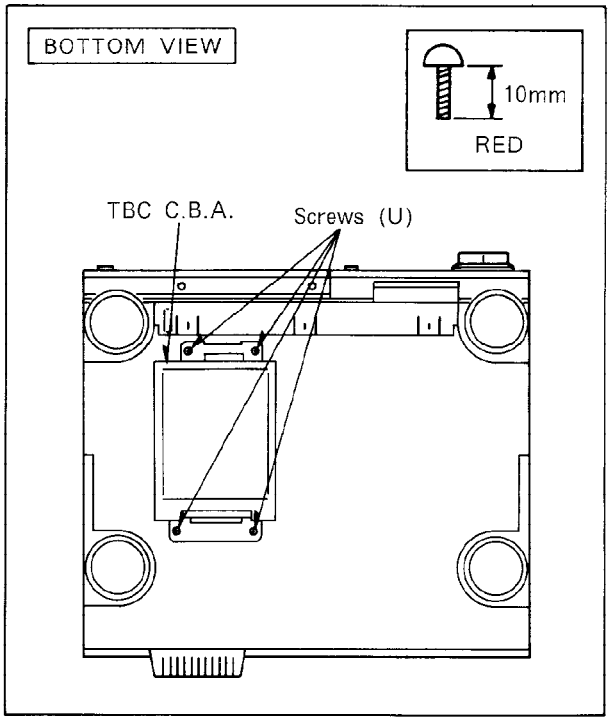


Fig. D9

10. PACK SERVICING POSITION

CAUTION:
Confirm that the isolation between Mechanical Chassis and Main C.B.A. before connecting Main AC.

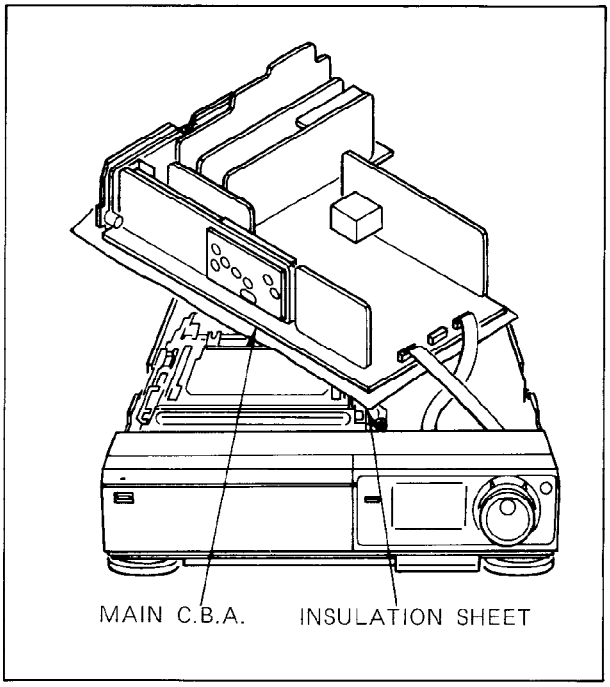


Fig. D10

11. REMOVAL OF THE CASSETTE COMPARTMENT

Remove the 2 screws(V) and a screw(W).
Slide the cassette holder unit for appearing 2 screws(X) by turning(clockwise) the Capstan Rotor Unit(located in the bottom side as shown in Fig.D12) and remove the 2 screws(X).
Remove the wire cable from connector P1508 mounted on Take-up Photo Tr. C.B.A., then carefully pull out the Cassette Compartment.

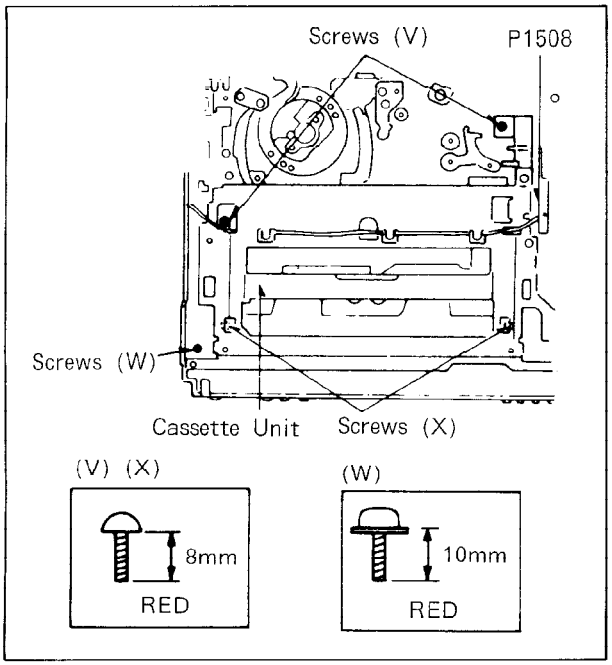


Fig. D11

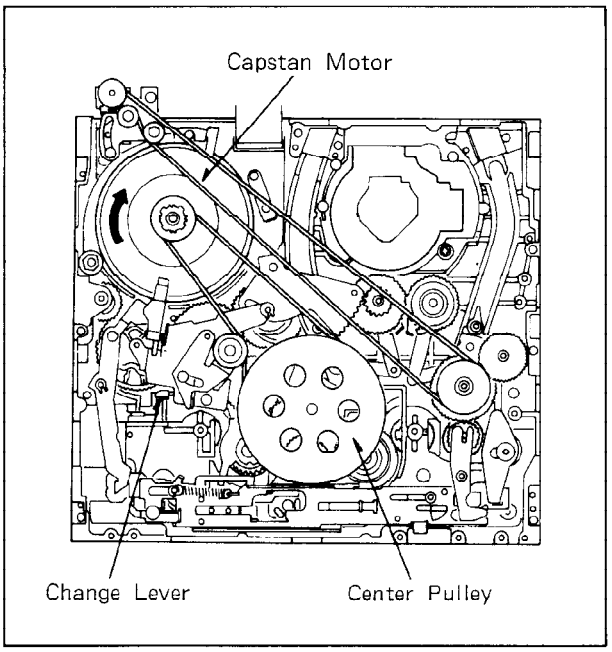


Fig. D12

12. REMOVAL OF THE CLEANER ARM UNIT

1. Hook the Spring Arm(a) to lower side of Hook(b).
2. Unlock the locking portion(c) and then remove the Cleaner Arm Unit.

NOTE:
(1) Perform the steps in the reverse order when Assembling.
(2) When replacing Upper Cylinder, replace Cleaner Arm at the same time.

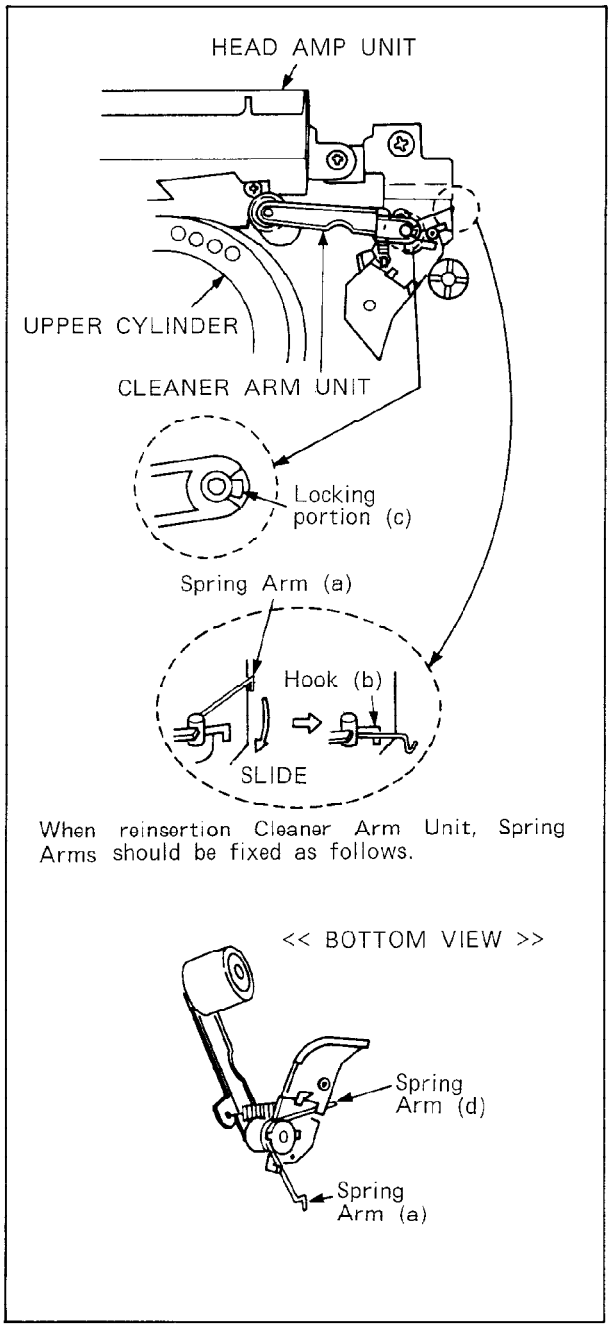


Fig. D13

2-2. MECHANICAL ADJUSTMENT PROCEDURES

This mechanical chassis of these model NV-FS200EG, FS88EG is the same as (G-II) Mechanical Chassis. Therefore please refer to the Service Manual "G-II/G-REV"(Order No. VRD8901M101).

2-2-1. TAPE INTERCHANGEABILTY ADJUSTMENT

CAUTIONS:

Make a Adjustment Mode as shown in Fig.M1 (Connect a Cut Jumper Wire).

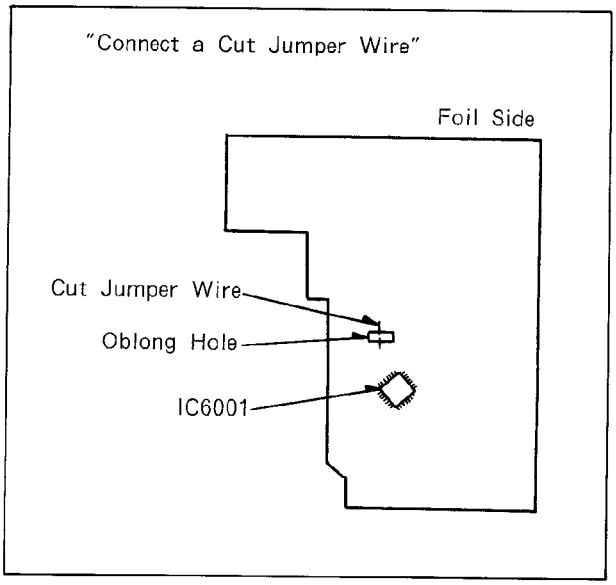
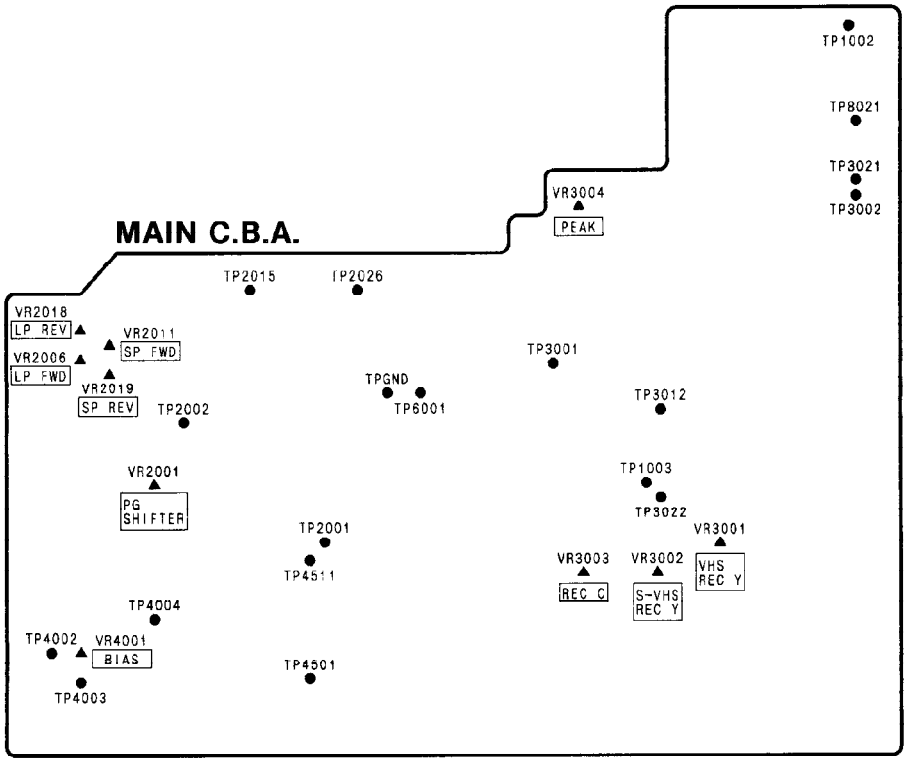
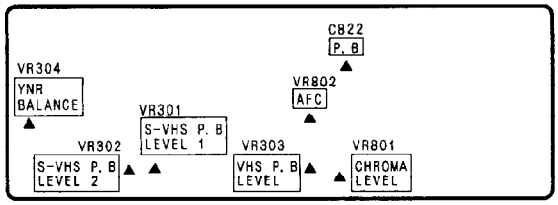


Fig. M1 Adjustment Mode

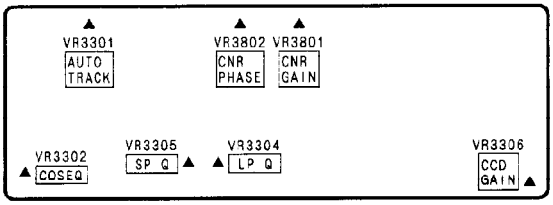
LOCATION OF TEST POINTS & CONTROLS



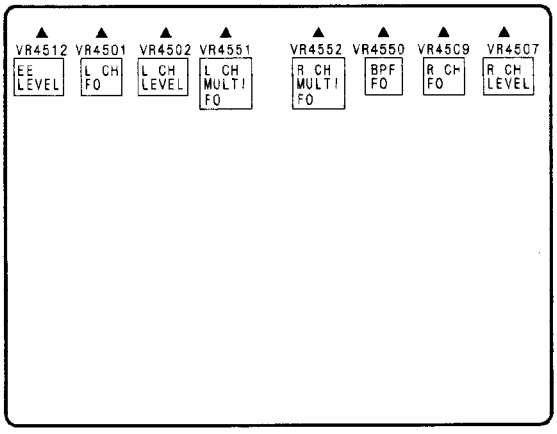
LUMINANCE & CHROMINANCE PACK C.B.A.



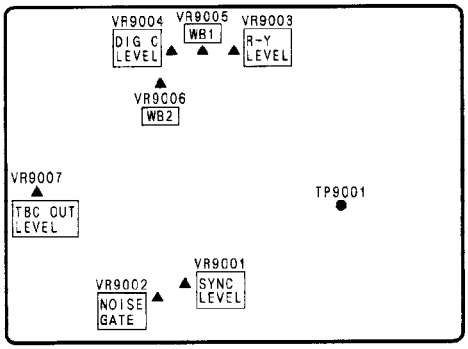
SUB LUMINANCE & CHROMINANCE PACK C.B.A.



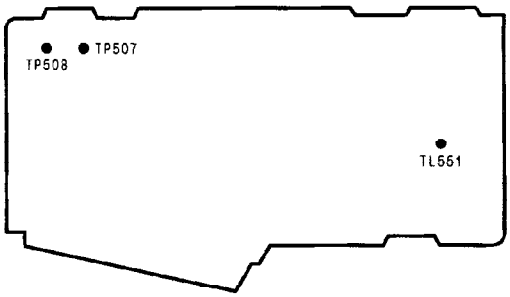
Hi-Fi AUDIO PACK C.B.A.



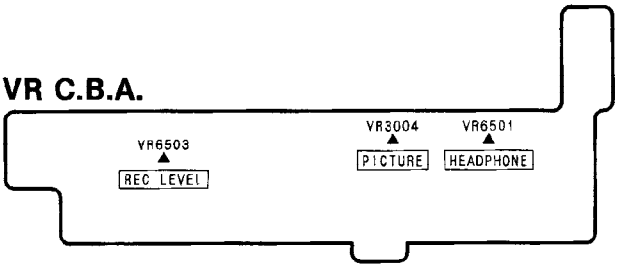
TBC C.B.A.



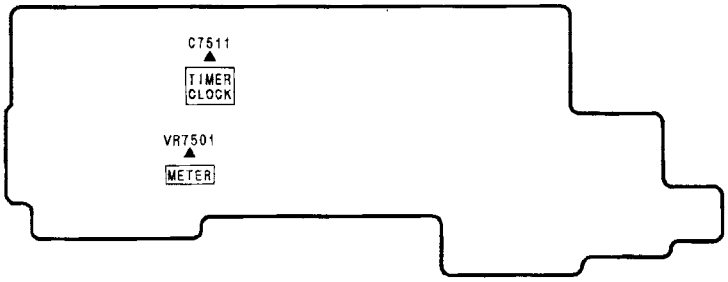
HEAD AMP C.B.A.



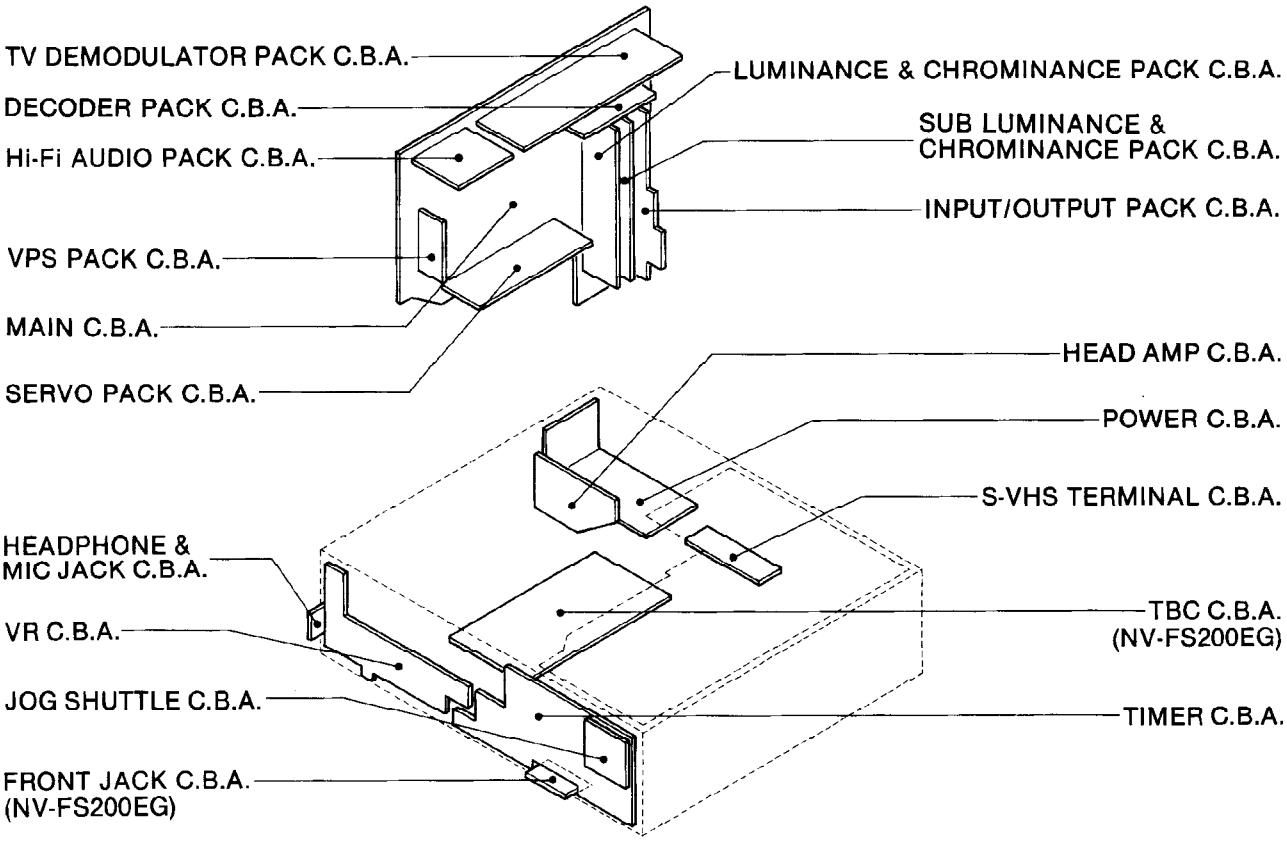
VR C.B.A.



TIMER C.B.A.



CIRCUIT BOARD LAYOUT



2-3. ELECTRICAL ADJUSTMENT PROCEDURES

This section provides complete electrical adjustment procedures which may be required for electronic circuits of S-VHS Video Cassette Recorders NV-FS200EG,FS88EG.

2-3-1. TEST EQUIPMENTS

To perform the electrical adjustments completely, following equipments are required.

1. VTVM (Vacuum Tube Volt Meter) or DVM (Digital Volt Meter)
   Voltage Range : 0.001 ~ 50V
2. Dual-Trace Oscilloscope
   Voltage Range : 0.005 ~ 50V/div.
   Frequency Range : DC-30MHz
   Probes : 10:1
3. Frequency counter
   Frequency Range : 0 ~ 10MHz
4. Signal Generator (Sinewave)
   Frequency Range : 0 ~ 50MHz
5. Video Sweep Generator
   Frequency Range : 0 ~ 10MHz
6. Colour Monitor TV
7. Plastic Tip Driver
8. VHS Alignment Tape (VFJ8125H3F)
9. Pattern Generator
10. VHS Blank Tape
11. S-VHS Blank Tape

2-3-2. HOW TO READ THE ADJUSTMENT PROCEDURES

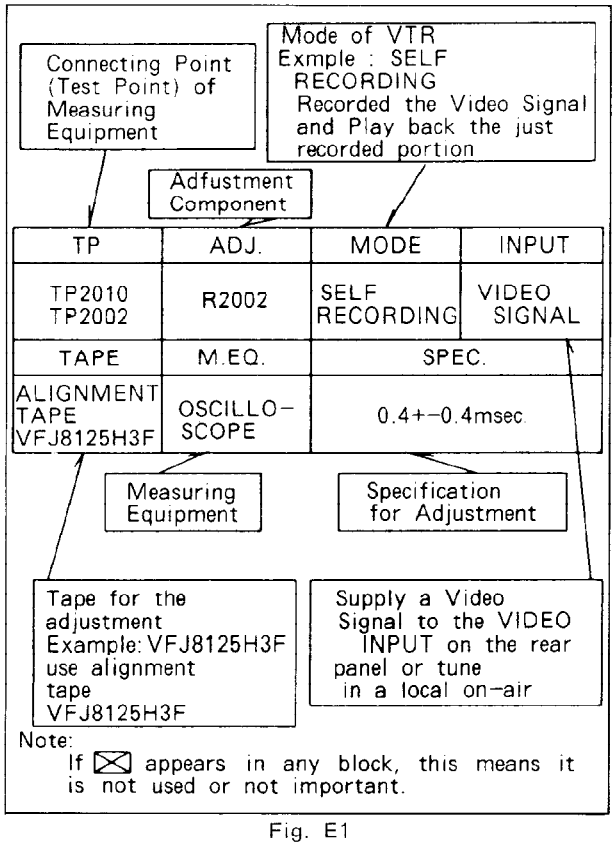

Connecting Point (Test Point) of Measuring Equipment
Mode of VTR Exmple : SELF RECORDING Recorded the Video Signal and Play back the just recorded portion
Adfustment Component
TP
ADJ.
MODE
INPUT
TP2010 TP2002
R2002
SELF RECORDING
VIDEO SIGNAL
TAPE
M.EQ.
SPEC.
ALIGNMENT TAPE VFJ8125H3F
OSCILLO-SCOPE
0.4+-0.4msec
Measuring Equipment
Specification for Adjustment
Tape for the adjustment Example: VFJ8125H3F use alignment tape VFJ8125H3F
Supply a Video Signal to the VIDEO INPUT on the rear panel or tune in a local on-air
Note:
If ⊠ appears in any block, this means it is not used or not important.

Fig. E1

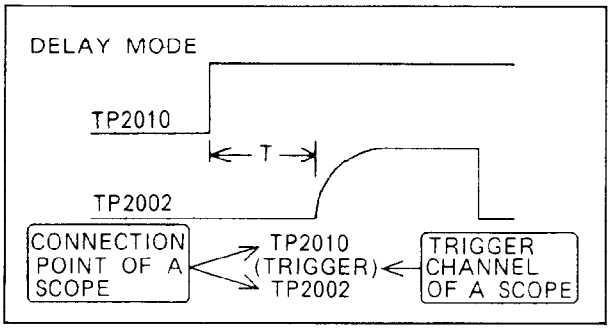


Fig. E2

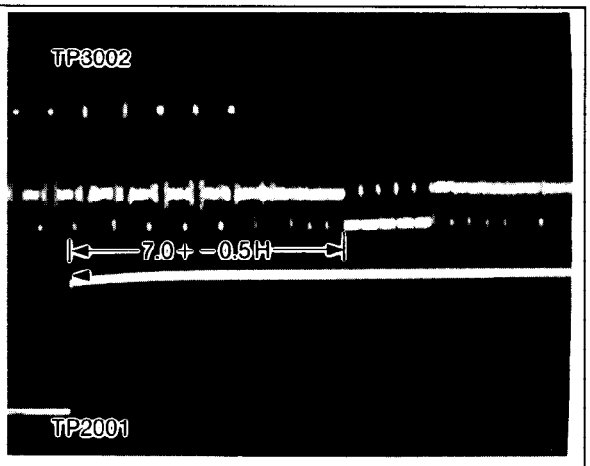
Note:
Before the electrical adjustment, set the VTR as following conditions except for especial instructions in each adjustment item.

1. Noise Filter SW...OFF
2. Hi-Fi/Normal MIX SW...OFF
3. Tape Select SW...-E195
4. Remote Mode SW...VTR1
5. Picture VR...FIX
6. Audio REC VR...FIX
7. Phones Level VR...MIN
8. JOG/SHUTTLE...CENTER
9. Audio Output Mode...Hi-Fi MODE
10. S-VHS SW...ON
11. Input Select Front SW...
    S-VIDEO(NV-FS200EG ONLY)
12. Search Sound SW...OFF
13. TBC SW...OFF (NV-FS200EG ONLY)
14. Normal Y/C Test SW...NORMAL

SERVO Section

2-3-3. PG SHIFTER ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP2001 TP3002	VR2001	PLAYBACK	
TAPE	**M. EQ.**	**SPEC.**	
ALIGNMENT TAPE VFJ8125H3F	OSCILLO-SCOPE	7.0+−0.5H	



TP3002 VIDEO
TP2001 H. SW (TRIGGER)

Fig. E3

2-3-4. AUTO TRACKING GAIN ADJUSTMENT

TP	ADJ.	MODE	INPUT
PS3011-1	VR3301	PLAYBACK	4MHz 200mVp-p (TO TP3001)
TAPE	**M. EQ.**	**SPEC.**	
	SIGNAL GENERATOR/ D.V.M.	3.1+−0.1Vp-p	

1. Set the output of Sinewave Signal Generator to 4MHz, 200mVp-p and supply it to TP3001.
2. Connect the D.V.M. (Digital Volt Meter) to Pin 1 of SUB Y/C pack C.B.A..
3. Adjust VR3301 so that reading of D.V.M. is 3.1+−0.1(Vp-p).

2-3-5. SLOW TRACKING ADJUSTMENT

TP	ADJ.	MODE	INPUT
ON THE MONITOR SCREEN	VR2011 (SP FWD) VR2019 (SP REV) VR2006 (LP FWD) VR2018 (LP REV)	SELF RECORDING AND SLOW (SP/LP MODE)	COLOUR BAR
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	TV MONITOR	REFER TO PROCEDURE	

NOTE:
1. Each slow speed is not specified.
2. Push the tracking button "+" and "−" at the same time.

1. Record the colour bar in SP mode for few time and then Record the colour bar in LP mode for few time.
2. Playback the just recorded SP portion and place the unit in forward SLOW mode.
3. Adjust VR2011 so that noise band to be minimized.
4. Place the unit in reverse SLOW mode.
5. Adjust VR2019 so that noise band to be minimized.
6. Playback the just recorded LP portion and place the unit in forward SLOW mode.
7. Adjust VR2006 so that noise band to be minimized.
8. Place the unit in reverse SLOW mode.
9. Adjust VR2018 so that noise band to be minimized.

LUMINANCE, CHROMINANCE & HEAD AMP Section

2-3-6. CHROMINANCE & LUMINANCE RECORDING CURRENT ADJUSTMENT

S-VHS CHROMINANCE RECORDING CURRENT ADJ.

TP	ADJ.	MODE	INPUT
TP507 (HOT) TP508 (GND)	VR3003	RECORDING (SP MODE)	COLOUR BAR (AV1 IN)
TAPE	**M. EQ.**	**SPEC.**	
S-VHS BLANK TAPE	OSCILLO-SCOPE	28+−2mVp-p	

1. Supply the colour bar signal to video input of AV1.
2. Supply the DC 5V to Pin 6 of Y/C pack C.B.A. to reduce luminance component.
3. Connect the oscilloscope to TP507 (HOT) and TP508 (GND).
4. Adjust VR3003 for 28+−2Vp-p as shown in Fig.E4.

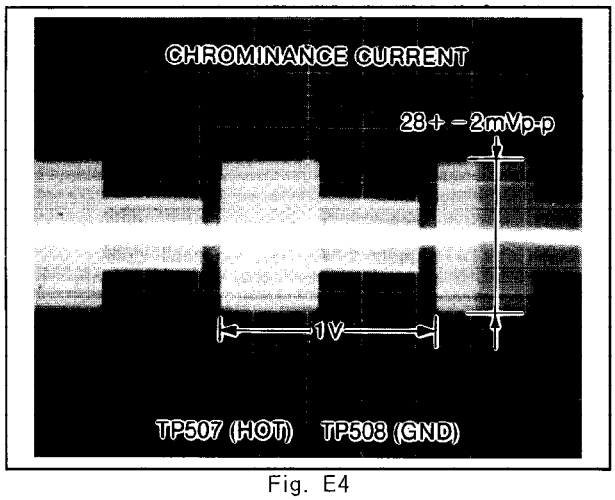


Fig. E4

S-VHS LUMINANCE RECORDING CURRENT ADJ.

TP	ADJ.	MODE	INPUT
TP507 (HOT) TP508 (GND)	VR3002	RECORDING (SP MODE)	COLOUR BAR (S-VIDEO IN)
TAPE	**M. EQ.**	**SPEC.**	
S-VHS BLANK TAPE	OSCILLO-SCOPE	110+−5mVp-p	

5. After chrominance recording current adjustment, remove the DC 5V to Pin 6 of Y/C pack C.B.A.
6. Adjust VR3002 for 110+−5mVp-p as shown in Fig.E5.

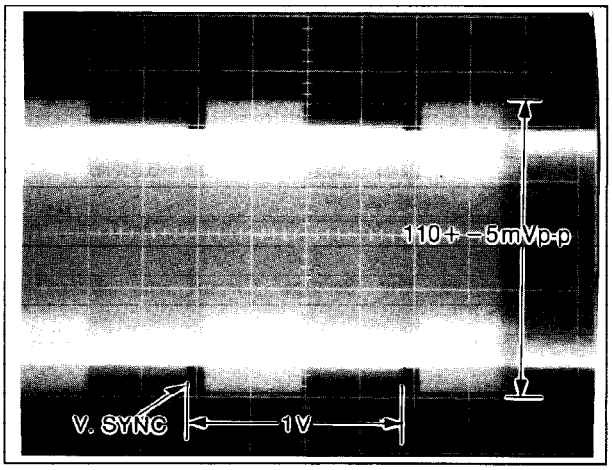


Fig. E5

VHS LUMINANCE RECORDING CURRENT ADJ.

TP	ADJ.	MODE	INPUT
TP507 (HOT) TP508 (GND)	VR3001	RECORDING (SP MODE)	COLOUR BAR (AV1 IN)
TAPE	**M. EQ.**	**SPEC.**	
VHS BLANK TAPE	OSCILLO-SCOPE	120+−5mVp-p	

1. Set the S-VHS SWITCH OFF position.
2. Connect the oscilloscope to TP507 (HOT) and TP508 (GND).
3. Adjust VR3001 for 120+−5mVp-p as shown in Fig.E6

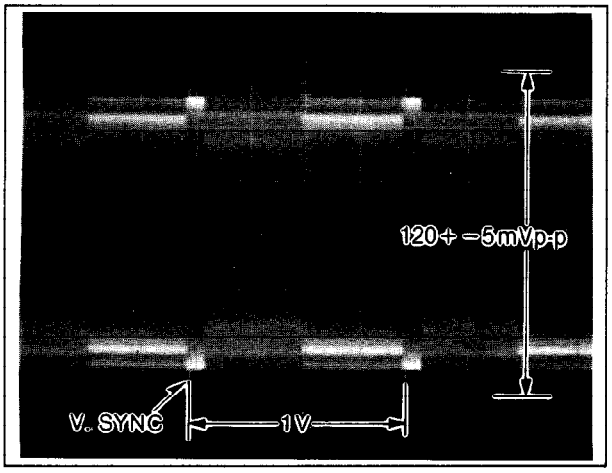


Fig.E6

This adjustment should be completed after S-VHS luminance and chrominance recording current adjustment.

2-3-7. RF PEAK FREQUENCY ADJUSTMENT

TP	ADJ.	MODE	INPUT
PP3011-18	VR3004	EJECT	SWEEP SIGNAL (150mVp-p, 7MHz) (PP3011-14)
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLO-SCOPE/ VIDEO SWEEP GENERATOR	7.0+−0.2MHz	

NOTE:

1. Connect the Service Circuit as shown in Fig.E7.
2. VR3302 is center position.

1. Set the output signal of sweep generator to 150mmVp-p, 7MHz (Video signal only).
2. Connect the Pin 17 of Y/C Pack C.B.A. (PP3002) to GND (compulsory S-VHS).
3. Supply set up video sweep signal to input point of service circuits.
4. Connect the osccilloscope to Pin 18 of SUB Y/C Pack c.b.a. (PP3011)
5. Adjust VR3004 so that the peak frequency becoems 7.0+−0.2MHz as shown in Fig.E8.

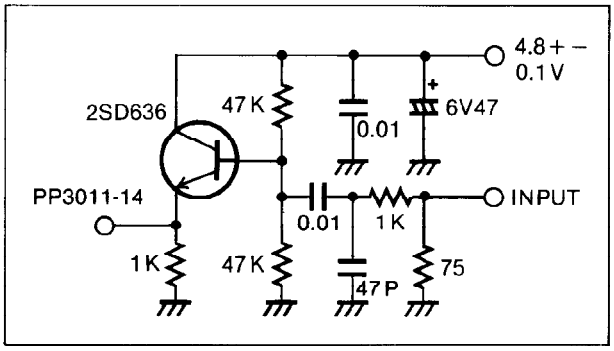


Fig. E7

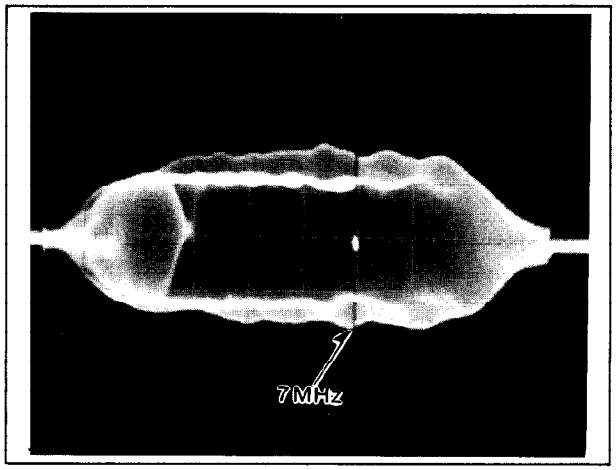


Fig. E8

2-3-8. S-VHS FREQUENCY RESPONSE ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP3021	VR3302	SELF RECORDING AND PLAYBACK (SP MODE)	SWEEP SIGNAL (S-VIDEO IN)
TAPE	**M. EQ.**	**SPEC.**	
S-VHS BLANK TAPE	OSCILLO-SCOPE/ VIDEO SWEEP GENERATOR	A : B=−4.5±1dB (50~70%)	

NOTE:

1. Set the output of video sweep generator as shown in Fig.E9.
2. This adjustment mast be done after RF peak frequency adjustment.

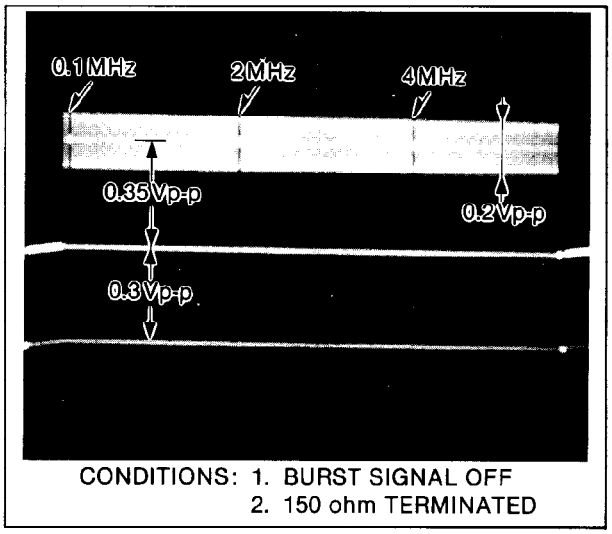


Fig. E9

1. Supply set up video sweep signal to S-VIDEO-IN.
2. Record the input signal in SP mode for few time.
3. Playback the just recorded portion.
4. Connect the oscilloscope to TP3021.
5. Adjust VR3302 so that the ratio of 0.1MHz level and 4MHz level(A:B) to be 50~70% as shown in Fig.E10.
   (Measure wide amplitude channel on 4MHz)

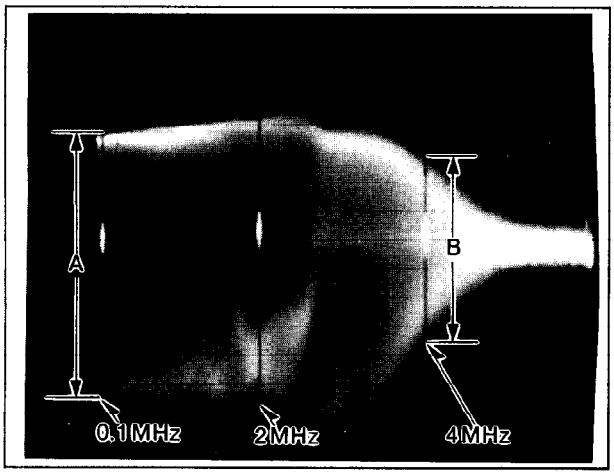


Fig. E10

2-3-9.VHS FREQUENCY RESPONSE ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP3021	VR3305 (SP) VR3304 (LP)	SELF RECORDING AND PLAYBACK (SP/LP MODE)	SWEEP SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	OSCILLO-SCOPE/ VIDEO SWEEP GENERATOR	SP: 0+−1dB (90~110%) LP: 0+−1dB (90~110%)	

NOTE:

Set the output of video sweep generator as shown in Fig.E11

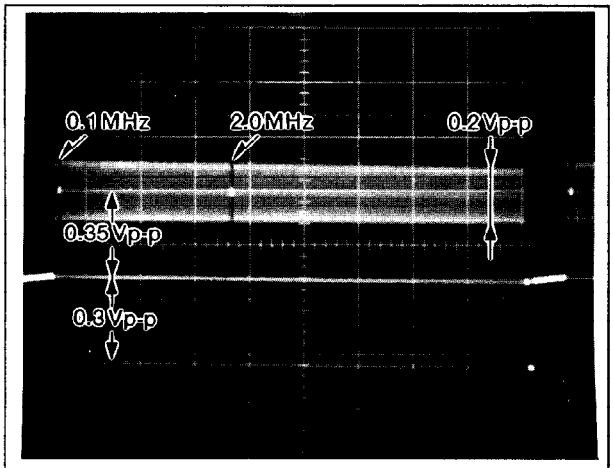


Fig. E11

1. Supply set up video sweep signal to Video input of AV1 and record input signal in SP mode for few time and record in LP mode also few time.
2. Playback the just recorded portion in SP mode.
3. Connect the oscilloscope to TP3021.
4. Adjust VR3305 so that the ratio of 0.1MHz level and 2MHz level (A:B) to be 0+−1dB(90% ~ 110%) as shown in Fig.E12.
5. Playback the just recorded portion in LP mode.
6. Adjust VR3304 so that the ratio of 0.1MHz level and 2MHz level(A:B) to be 0+−1dB(90% ~ 110%) as shown in Fig.E13.

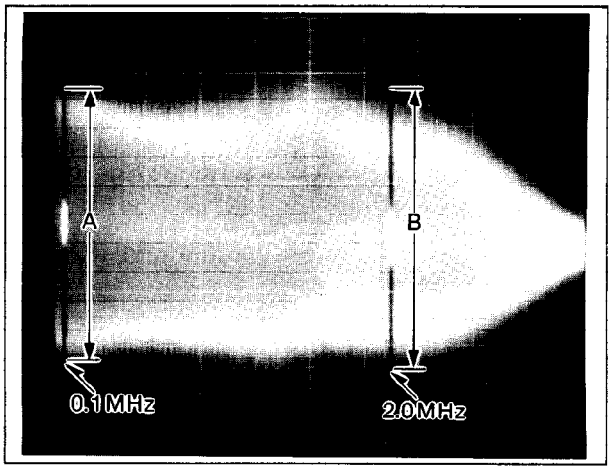


Fig. E12: **SP MODE**

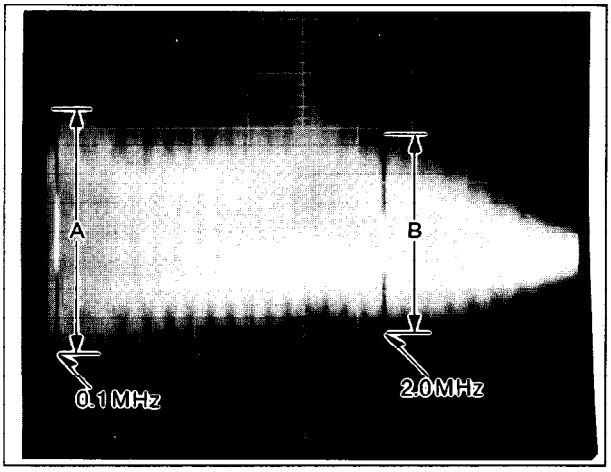


Fig. E13: **LP MODE**

2-3-10. LUMINANCE NOISE REDUCTION BALANCE ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC301-34	VR304	RECORDING (LP MODE)	COLOUR BAR (AV1 IN)
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	OSCILLO-SCOPE	WAVEFORM IS MINIMIZED	

NOTE:

Connect the capacitor(1500pF) between Pin 34 of IC301 and GND as shown in Fig.E14.

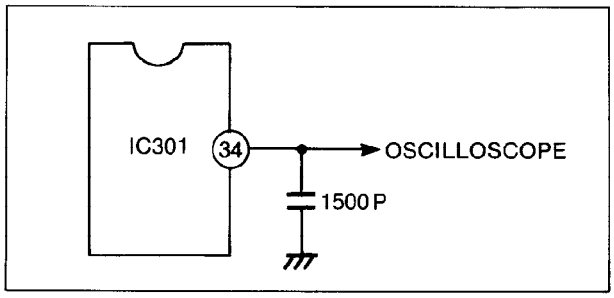


Fig. E14

1. Supply colour bar Signal to video input of AV1 and record input in signal LP mode for few time.
2. Connect the Oscilloscope to Pin 34 of IC301.
3. Adjust VR304 so that waveform becomes minimum as shown in Fig.E16.

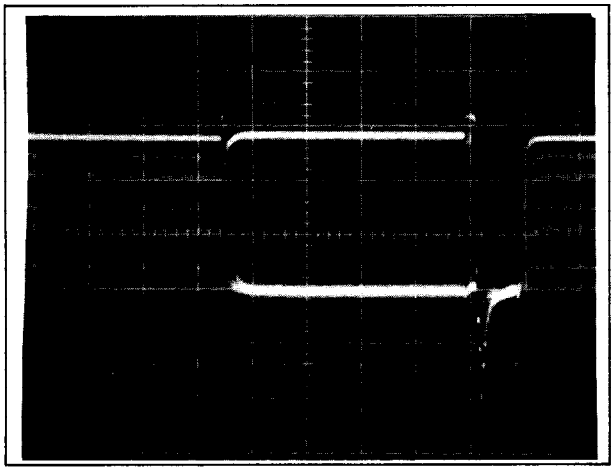


Fig. E15 Before ADJ.

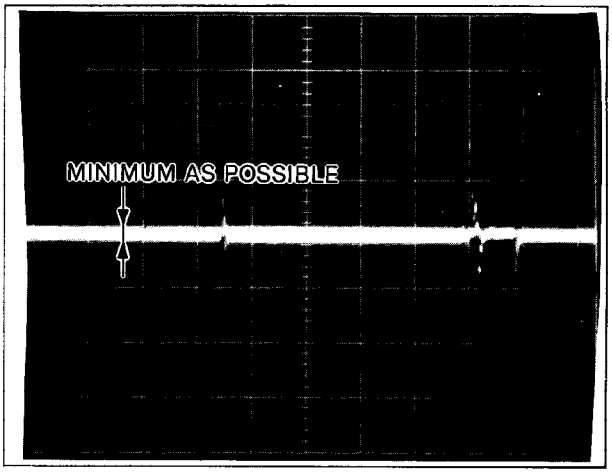


Fig. E16 After ADJ.

2-3-11. CHROMINANCE RECURSIVE ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC3801-9	VR3801 VR3802	SELF RECORDING AND PLAYBACK (SP MODE)	COLOUR BAR (AV1 IN)
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	OSCILLO-SCOPE	MINIMUM WAVEFORM	

1. Supply colour bar signal to video input of AV1 and record input signal in SP mode for few time.
2. Playback the just recorded portion.
3. Connect the oscilloscope to Pin 9 of IC3801.
4. Adjust VR8301 and VR8302 mutually so that the chrominance amplitude to be minimum as shown in Fig.E18

NOTE:

Confirm this adjustment after complete recording current adjustment.

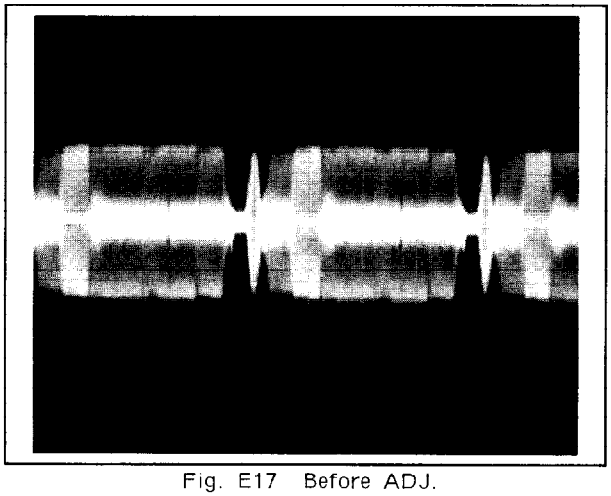


Fig. E17 Before ADJ.

Fig. E18 After ADJ.

2-3-12. ARTIFICIAL NTSC AFC FREE RUN ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC803-9	VR802	STOP	SINEWAVE 8kHz −10dB (316mV) (AV1 IN)
TAPE	**M. EQ.**	**SPEC.**	
	FREQUENCY COUNTER/ SINEWAVE GENERATOR	15735+−100 (Hz)	

NOTE:
Supply +5V DC to Pin 15 of IC803.

1. Supply the sinewave(8KHz/−10dB) to video input of AV1.
2. Connect the frequency counter to Pin 9 of IC803.
3. Turn VR802 to end of direction which is maximum frequency side.
4. Adjust VR802 so that the frequency becomes 15735+−100(Hz).

2-3-13. VHS PLAYBACK LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP3021	VR303	SELF RECORDING AND PLAYBACK (SP MODE)	COLOUR BAR (AV1 IN)
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	OSCILLO-SCOPE	1.0+−0.05Vp-p	

NOTE:
S-VHS should be off.

1. Supply colour bar signal to video input of AV1 and record the input signal in SP mode for few time.
2. Playback the just recorded portion.
3. Connect the oscilloscope to TP3021.
4. Adjust VR303 so that the luminance level to be 1.0+−0.05Vp-p.

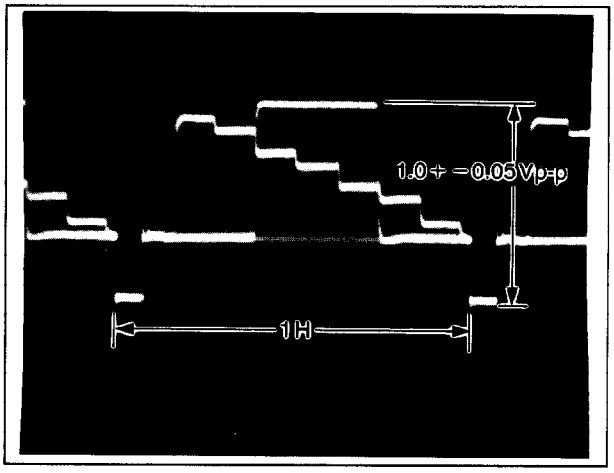


Fig. E19

2-3-14. S-VHS PLAYBACK LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP3022 TP3021	VR301 (S-P.B 1) VR302 (S-P.B 2)	SELF RECORDING AND PLAYBACK (SP MODE)	COLOUR BAR (AV1 IN)
TAPE	**M. EQ.**	**SPEC.**	
S-VHS BLANK TAPE	OSCILLO-SCOPE	TP3022: 400+−10mVp-p TP3021: 1.0+−0.05Vp-p	

1. Supply colour bar signal to video input of AV1 and record the input signal in SP mode for few time.
2. Playback the just recorded portion.
3. Connect the oscilloscope to TP3022.
4. Adjust VR301 so that the luminance level to be 400+−10mVp-p as shown in Fig.E20.

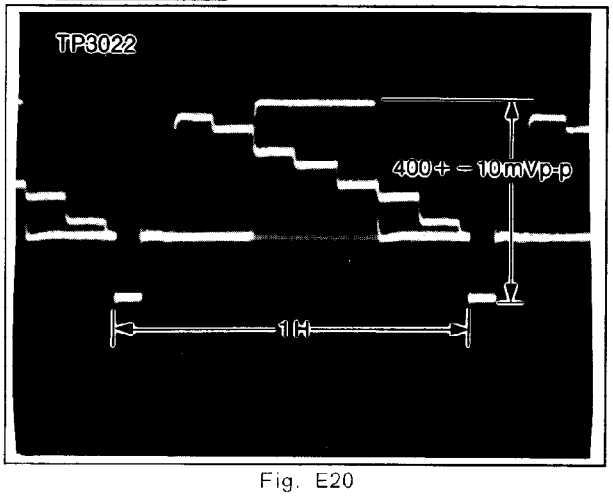


Fig. E20

5. Connect the oscilloscope to TP3021.
6. Adjust VR302 so that the luminance level to be 1.0+−0.05Vp−p as shown in Fig.E21.

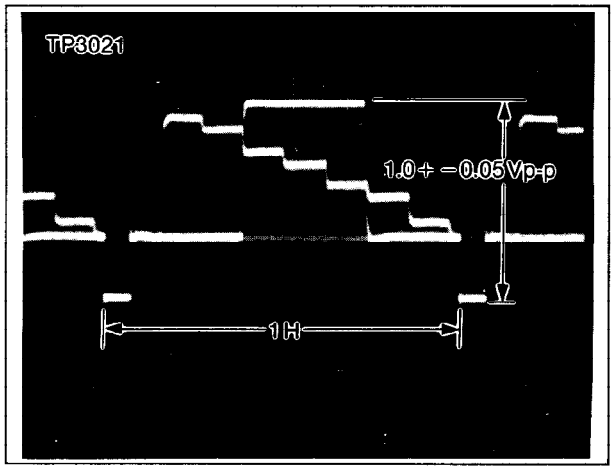


Fig. E21

2−3−15. CHROMINANCE PLAYBACK LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP8021	VR801	SELF RECORDING AND PLAYBACK (SP MODE)	COLOUR BAR (AV1 IN)
TAPE	**M. EQ.**	**SPEC.**	
VHS BLANK TAPE	OSCILLO-SCOPE	CYAN: 0.55+−0.05Vp-p	

1. Supply colour bar signal to video input of AV1 and record the input signal in SP mode for few time.
2. Playback the just recorded portion.
3. Connect the oscilloscope to TP8021.
4. Adjust VR801 so that the playback cyan level to be 0.55+−0.05mVp−p as shown in Fig.E22.

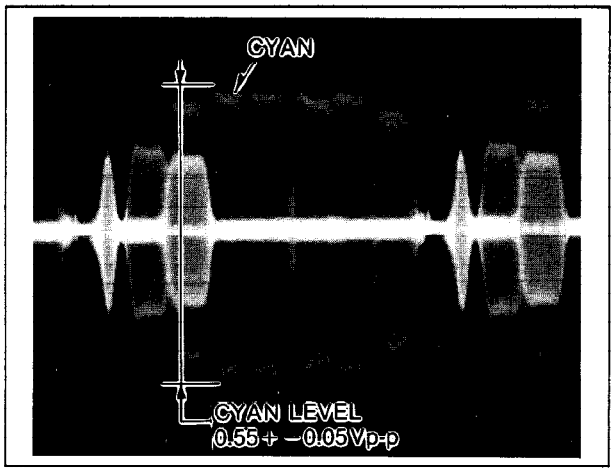


Fig.E22

2−3−16. CCD GAIN ADJUSTMENT

TP	ADJ.	MODE	INPUT
PS3012-33	VR3306	STOP	COLOUR BAR (AV1 IN)
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLO-SCOPE	A : B=50+−1.5%	

1. Supply colour bar signal to video input of AV1.
2. Connect the oscilloscope to Pin 31 and Pin 33 of Sub Y/C pack C.B.A.(PS3012)
3. Reading the level to pin 31 of Sub Y/C pack C.B.A.(PS3012)
4. Adjust VR3306 so that the level of pin 31(B) of the level of pin 33(A) of Sub Y/C pack C.B.A. (PS3012) to 50+−1.5% as shown in Fig.E23.

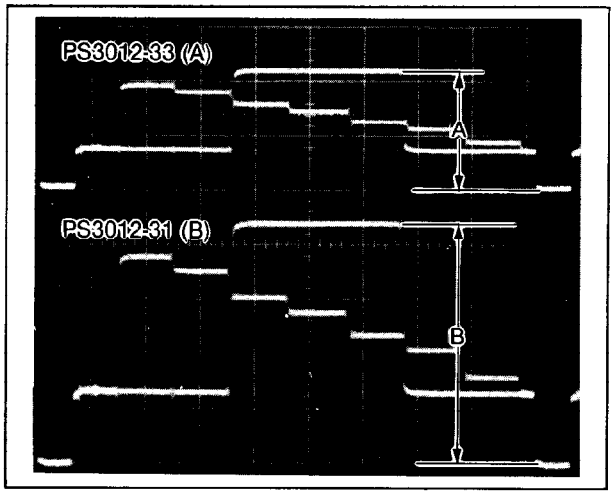


Fig. E23

2−3−17. PILOT BURST PHASE ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC801-15	C822	EJECT	COLOUR BAR (S-VIDEO IN)
TAPE	**M. EQ.**	**SPEC.**	
	VECTOR-SCOPE	−95+−5°	

NOTE:
1. S-VHS SW should be ON.
2. Connect jumper wire between Pin 5 of IC801 and GND.
3. Add DC 2.5V to Pin 37 of IC801.
4. Supply 4.43MHz(Pin 42 of Y/C pack C.B.A. (PA3003)) ot vectorscope EXT. REF terminal.

1. Supply Y/C separated colour bar signal to S-VIDEO-IN.
2. Adjust C822 so that the pilot burst phase comes −95+−5° as shown in Fig.E24.

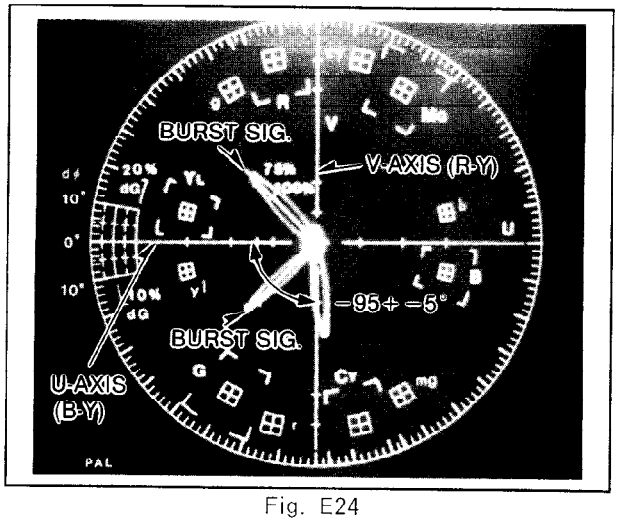


Fig. E24

2-3-18. TBC NOISE GATE ADJUSTMENT (NV-FS200EG ONLY)

TP	ADJ.	MODE	INPUT
TP9001	VR9002	SELF RECORDING AND PLAYBACK (SP MODE)	COLOUR BAR (AV1 IN)
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	OSCILLO-SCOPE	B=1.0+−0.1μsec	

1. Supply colour bar signal to video input of AV1 and record the input signal in SP mode for few time.
2. Playback the just recorded portion.
3. Connect the oscilloscope to TP9001.
4. Adjust VR9002 so that the noise gate width "B" to be 1.0+−0.1us as shown in Fig.E25.

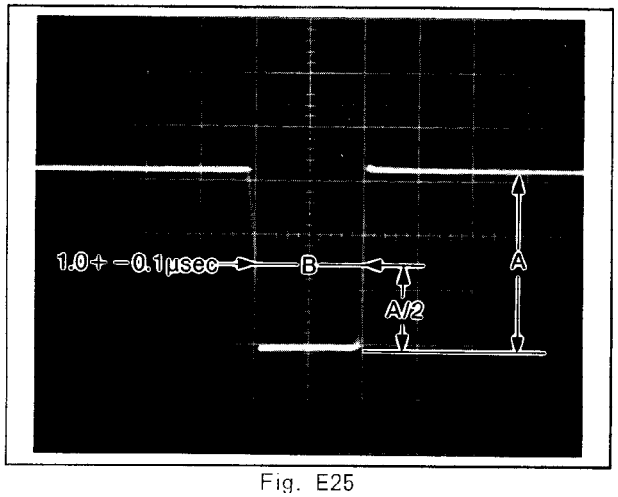


Fig. E25

2-3-19. TBC SYNC LEVEL ADJUSTMENT (NV-FS200EG ONLY)

TP	ADJ.	MODE	INPUT
P9001-1	VR9001	SELF RECORDING AND PLAYBACK (SP MODE)	COLOUR BAR (AV1 IN)
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	OSCILLO-SCOPE	B/A=43+−2%	

NOTE:
TBC SW should be ON.

1. Supply colour bar signal to video input of AV1 and record the input signal in SP mode for few time.
2. Playback the just recorded portion.
3. Connect the oscilloscope to Pin 1 of P9001.
4. Adjust VR9001 so that the ratio of video and sync "B/A" to be 43+−2% as shown in Fig.E26.

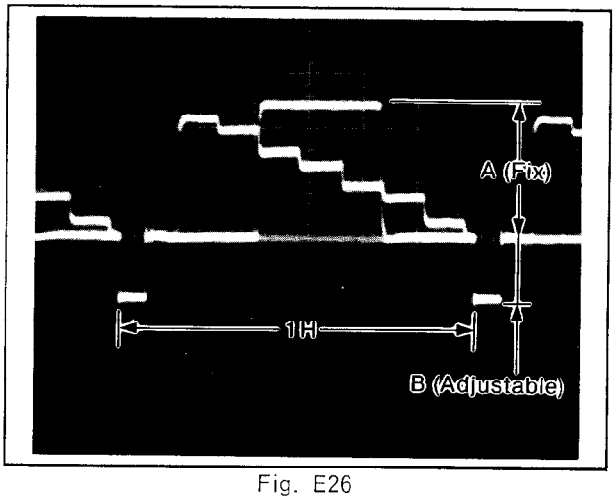


Fig. E26

2-3-20. TBC WHITE BALANCE ADJUSTMENT (NV-FS200EG ONLY)

TP	ADJ.	MODE	INPUT
P9001-5	VR9005 VR9006	SELF RECORDING AND PLAYBACK (SP MODE)	COLOUR BAR (AV1 IN)
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	OSCILLO-SCOPE	MINIMUM AC COMPONENT ON WHITE PORTION	

NOTE:
TBC SW should be ON.

1. Supply colour bar signal to video input of AV1 and record the input signal in SP mode for few time.
2. Playback the just recorded portion.
3. Connect the oscilloscope to Pin 5 of P9001.
4. Adjust VR9005 and VR9006 mutually so that the signal of white portion to be minimized as shown in Fig.E27.

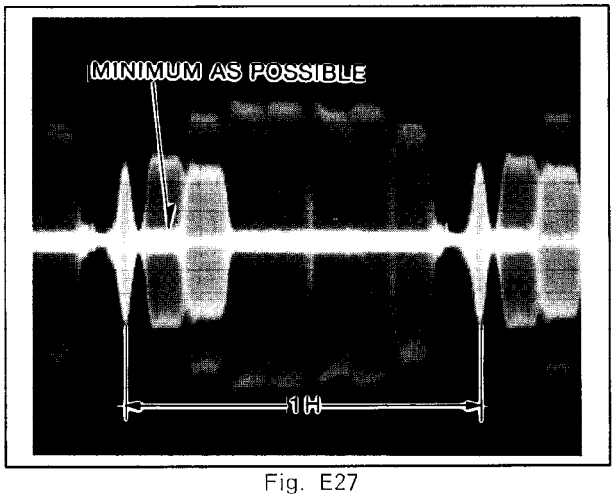


Fig. E27

2-3-21. TBC R-Y LEVEL ADJUSTMENT (NV-FS200EG ONLY)

TP	ADJ.	MODE	INPUT
AV1 OUT	VR9003	SELF RECORDING AND PLAYBACK (SP MODE)	COLOUR BAR (AV1 IN)
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	VECTOR-SCOPE	TBC ON AND OFF RED VECTOR PHASE DIFFERENCE IS +−3°	

1. Supply colour bar signal to video input of AV1 and record the input signal in SP mode for few time.
2. Playback the just recorded portion.
3. Confirm the RED vector phase when TBC SW off.
4. Turn on the TBC SW and adjust VR9003 so that the red vector comes +−3° compare with TBC SW off condition as shown in Fig.E28.

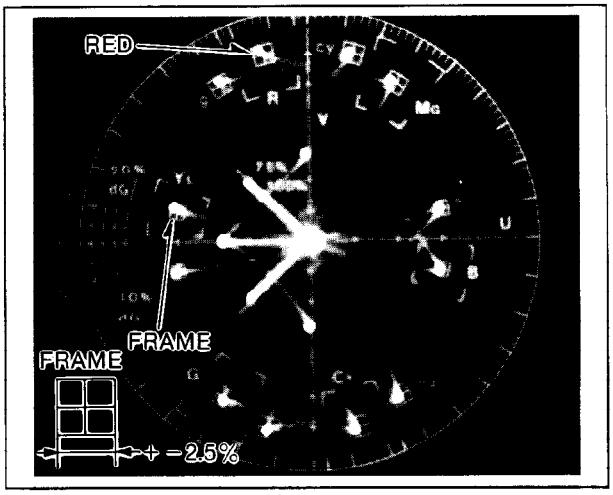


Fig. E28

2-3-22. TBC DIGITAL CHROMINANCE LEVEL ADJUSTMENT (NV-FS200EG ONLY)

TP	ADJ.	MODE	INPUT
AV1 OUT	VR9004	SELF RECORDING AND PLAYBACK (SP MODE)	COLOUR BAR (AV1 IN)
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	VECTOR-SCOPE	TBC ON AND OFF BURST LEVEL BECOMES SAME	

1. Supply colour bar signal to video input of AV1 and record the input signal in SP mode for few time.
2. Playback the just recorded portion.
3. Adjust GAIN VR on vectorscope so that the burst vector gain to be 75% when TBC SW off.
4. Turn on the TBC SW and adjust VR9004 so that the burst vector gain to be same as the TBC SW off condition(75%) as shown in Fig.E29.

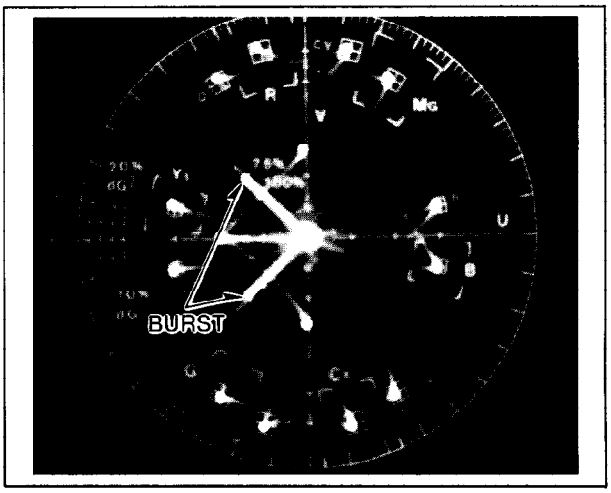


Fig. E29

NOTE:

Confirm TBC R-Y LEVEL AND TBC DIGITAL CHROMINANCE LEVEL Adjustments mutually when them adjust.

2-3-23. TBC PLAYBACK LEVEL ADJUSTMENT (NV-FS200EG ONLY)

TP	ADJ.	MODE	INPUT
P9001-1	VR9007	SELF RECORDING AND PLAYBACK (SP MODE)	COLOUR BAR (AV1 IN)
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	OSCILLO-SCOPE	100+−2.5%	

1. Supply colour bar signal to video input of AV1 and record the input signal in SP mode for few time.
2. Playback the just recorded portion.
3. Connect the oscilloscope to Pin 3 and Pin 1 of P9001.
4. Reading the playback level to Pin 3 of P9001.
5. Adjust VR9007 so that the level of Pin 3 of P9001 and Pin 1 of P9001 to be 100+−2.5%.

TIMER Section

2-3-24. TIMER CLOCK ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP7501	C7511		
TAPE	**M. EQ.**	**SPEC.**	
	FREQUENCY COUNTER	7812.5+−0.015μsec	

1. Connect the frequency counter to TP7501.
2. Adjust C7511 for 7812.5+−0.015us.

NORMAL AUDIO Section

2-3-25. AUDIO BIAS CURRENT ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP4002(+) TP4003(−)	VR4001	RECORDING	
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	V.T.V.M.	2.3+−0.1mVrms	

1. Connect the V.T.V.M. to TP4002 (+) and TP4003 (−). (Do not ude long cable for Connection)
2. Make a short circuit between terminal of audio input and GND.
3. Place the Unit in Recording mode.
4. Adjust VR4001 so that reading of V.T.V.M. becomes 2.3+−0.1mVrms.

Hi-Fi AUDIO Section

2-3-26. AUDIO PLAYBACK LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
AV1 OUT	VR4501	STOP	1kHz, −10dB SINEWAVE (AV1 IN)
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	SIGNAL GENERATOR/ V.T.V.M.	EE LEVEL=−8+−0.5dB (380mVrms~420mVrms)	

1. Set the STEREO Mode.
2. Adjust VR4512 so that the level of the (L)CH to be E-E level −8+−0.5dB(380~420mVrms).

NOTE:

Before this adjustment, "Tape Interchangeability Adjustment" and "Audio Bias Current Adjustment" must be completed.

2-3-27. Hi-Fi AUDIO CARRIER FREQUENCY ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC4501-34 (L) IC4501-47 (R)	VR4551 (PAL-L) VR4552 (PAL-R) VR4501 (NTSC-L) VR4509 (NTSC-R)	RECORDING (SP MODE)	
TAPE	**M. EQ.**	**SPEC.**	
	FREQUENCY COUNTER	PAL-L: 1400+−3kHz PAL-R: 1800+−3kHz NTSC-L: 1300+−3kHz NTSC-R: 1700+−3kHz	

1. Connect the GND to Pin 47 of IC6001 (compulsory NTSC mode).
2. Recording the unit in SP mode.
3. Connect the frequency couter to Pin 34 of IC4501.
4. Adjust VR4501 so that the frequency to be 1300+−3KHz.
5. Connect the frequency counter to Pin 47 of IC4501.
6. Adjust VR4509 so that the frequency to be 1700+−3KHz.

7. Disconnect the GND to Pin 47 of IC6001.
8. Recording unit in SP mode.
9. Connect the frequency counter to Pin 34 of IC4501.
10. Adjust VR4551 so that the frequency to be 1400+−3KHz.
11. Connect the frequency counter to Pin 47 of IC4501.
12. Adjust VR4552 so that the frequency to be 1800+−3KHz.

2−3−28. AUDIO DEVIATION ADJUTMENT

TP	ADJ.	MODE	INPUT
BETWEEN VR4502 AND R4511 (L) BETWEEN VR4507 AND R4561 (R)	VR4502 (L) VR4507 (R)	RECORDING (SP MODE)	1kHz, −10dB (316mVp-p) (AV1 IN)
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	V.T.V.M.	120mVrms	

1. Set the output level of the Signal Generator to 1KHz/−10dB and supply it to both Audio Input terminals (L) and (R).
2. Adjust the recording level (Audio output) with Hi−Fi Rec Level VR on the Front Panel so that the audio outputs are 400mVrms (V.T.V.M.) at both Audio Output terminals (L) and (R).
3. Connect the V.T.V.M. between VR4502 and R4511
4. Adjust VR4502 so that the level becomes 120mVrms.
5. Connect the V.T.V.M. between VR4507 and R4561
6. Adjust VR4507 so that the level becomes 120mVrms.

2−3−29. FM BPF LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC4501-33 (L) IC4501-48 (R)	VR4550	PLAYBACK	1.608MHz 400mVp-p (PS4003-8)
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	SIGNAL GENERATOR/ D.V.M.	L CH=R CH	

1. Remove the P551.
2. Record the no signal with SP mode.
3. Set the output of the signal generator to 1.608MHz and 400mVp−p, and supply it to Pin 8 of PS4003.
4. Connect the D.V.M. to the Pin 33 and Pin 48 of IC4501.
5. Play back the just recorded portion.
6. Adjust VR4550 so that the (L)CH level and (R)CH level is the same level.

2−3−30. LEVEL METER SENSITIVITY ADJUSTMENT

TP	ADJ.	MODE	INPUT
LEVEL METER	VR7501	STOP	1kHz, −10dB (AV1 IN)
TAPE	**M. EQ.**	**SPEC.**	
	SIGNAL GENERATOR	0dB INDICATOR JUST LIGHT UP	

1. Set the Audio Playback Mode Selector to STEREO position by infrared remotecontrollar. (Both the Left and Right Indicators are lit.
2. Set the Audio recording SW to MANUAL. Next Adjust the output level with the Audio Rec Level Controls so that the audio outputs are 400mVrms at both Output Jacks (L) and (R).
3. Adjust VR7501 so that the 0dB indicator just lights up on the level meter as shown in Fig.E30.

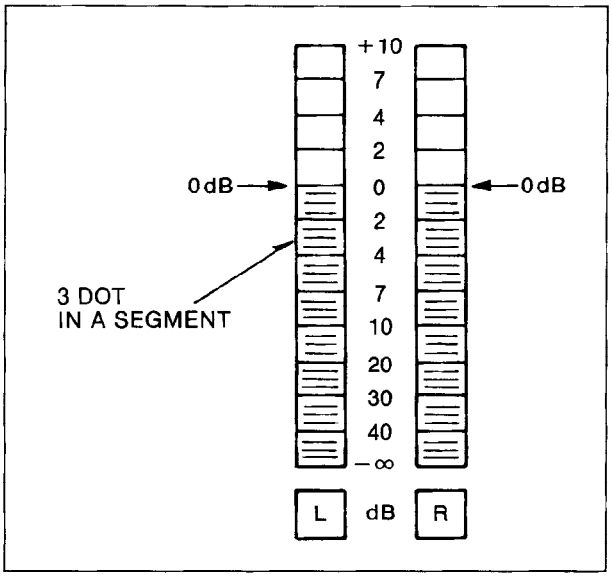
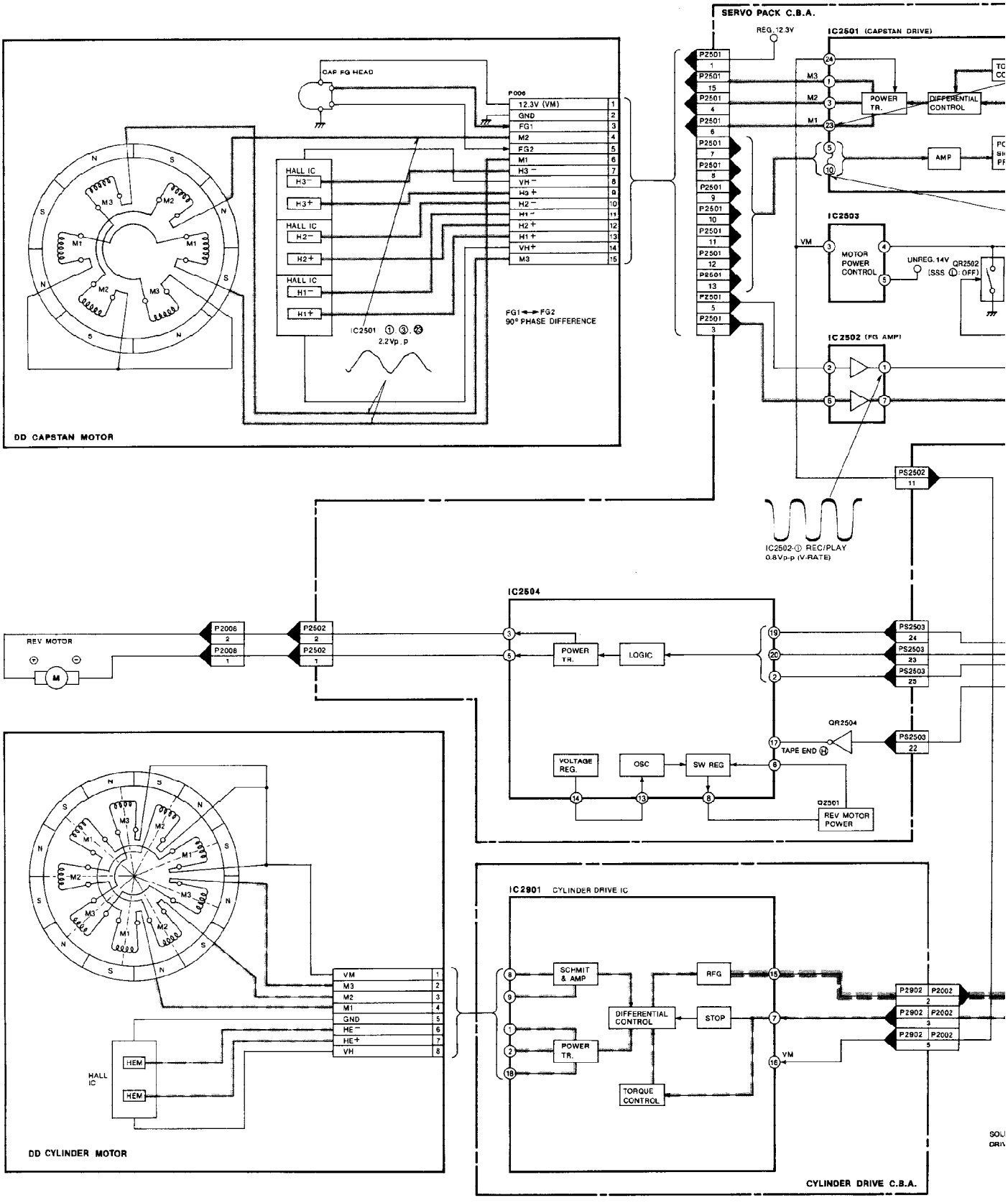
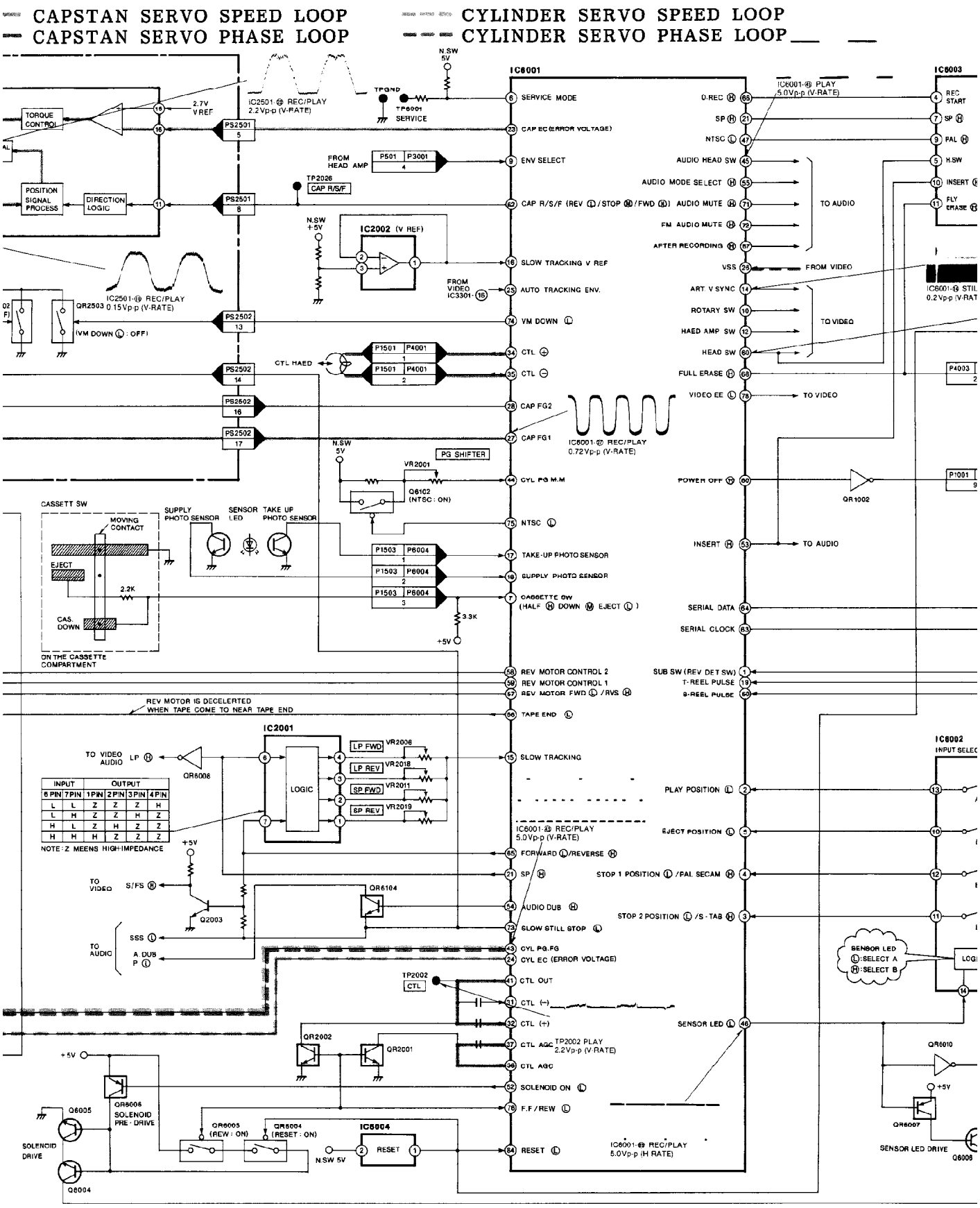
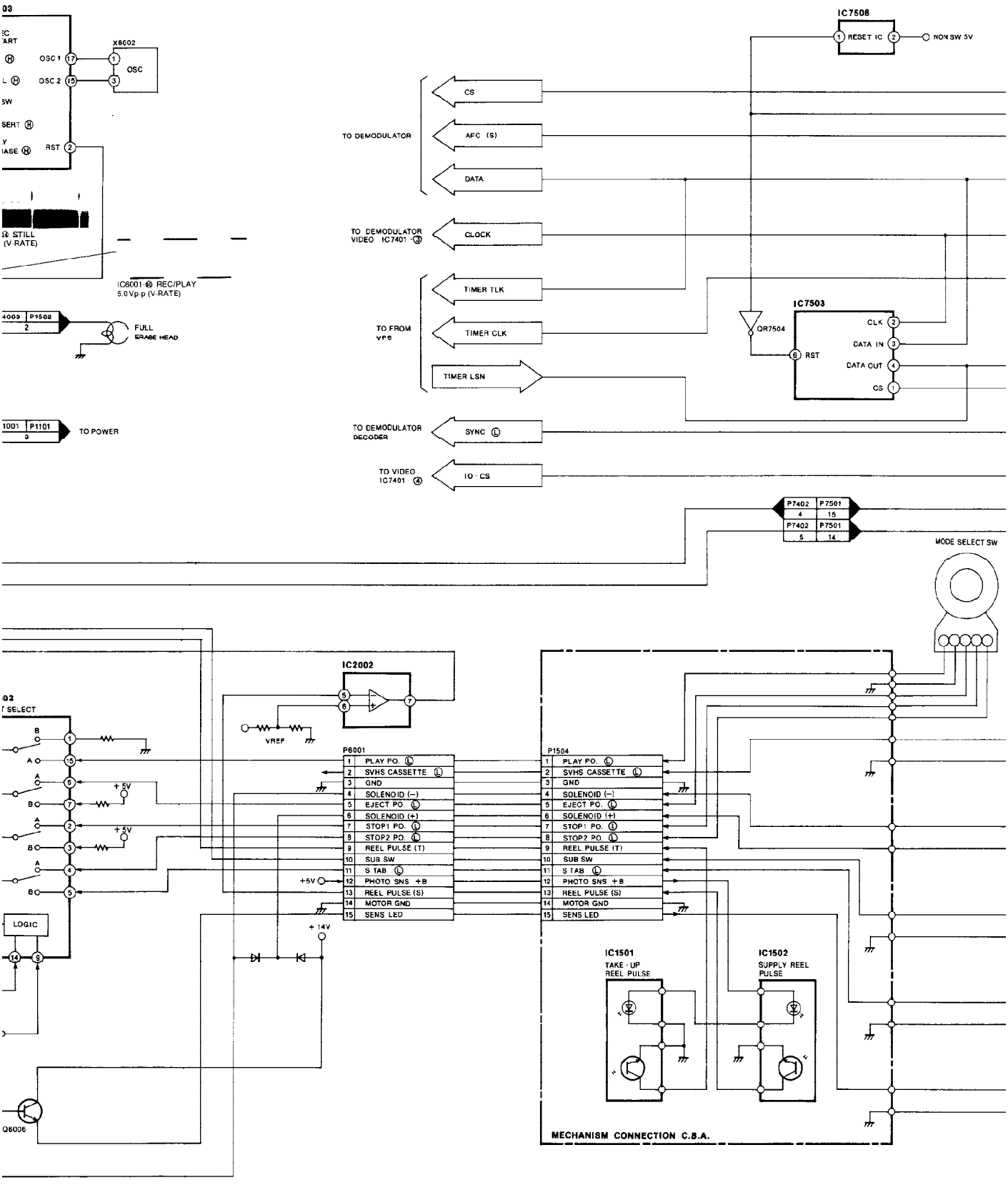


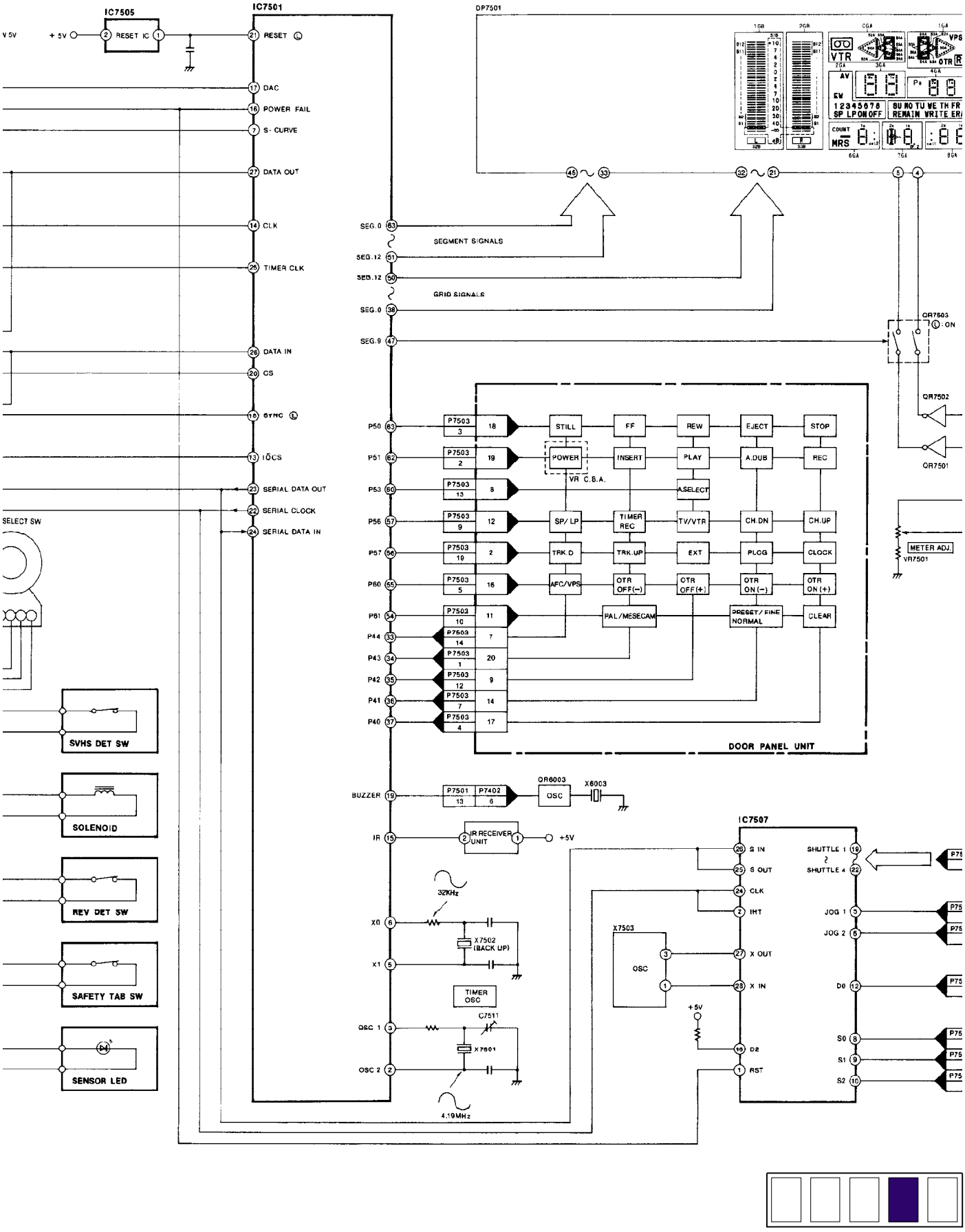
Fig. E30

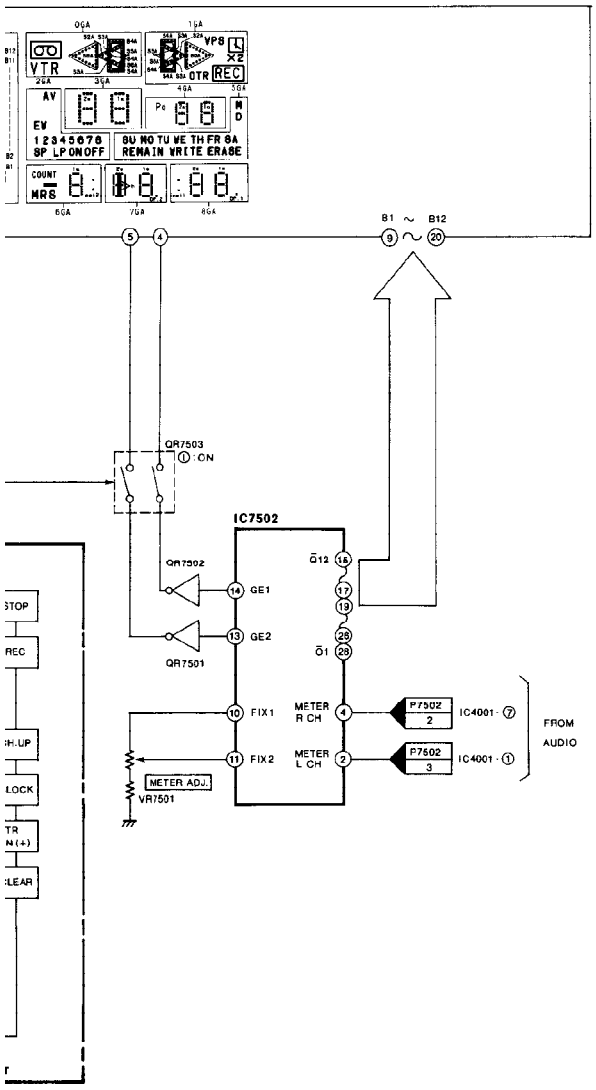
SECTION 3
BLOCK DIAGRAMS
3-1. SYSTEM CONTROL & SERVO BLOCK DIAGRAM

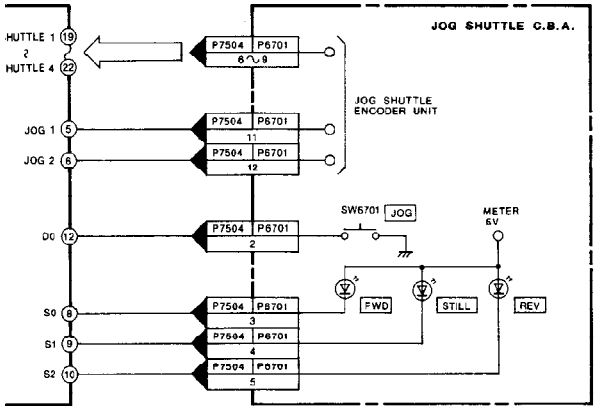


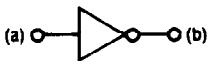
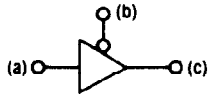
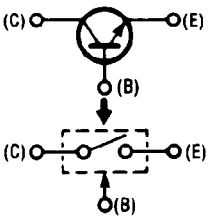
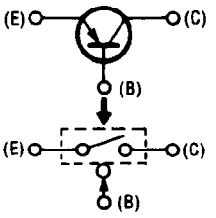
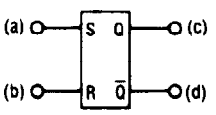

CAPSTAN SERVO SPEED LOOP
CAPSTAN SERVO PHASE LOOP
CYLINDER SERVO SPEED LOOP
CYLINDER SERVO PHASE LOOP
IC6001
IC6003
IC6002
IC2001
IC2002 (V REF)
IC6004
TORQUE CONTROL
POSITION SIGNAL PROCESS
DIRECTION LOGIC
PS2501
PS2502
FROM HEAD AMP
P501 P3001
TP2026 CAP R/S/F
TP6001 SERVICE
N.SW 5V
2.7V VREF
IC2501-⑱ REC/PLAY 2.2Vp-p (V-RATE)
IC2501-⑲ REC/PLAY 0.15Vp-p (V-RATE)
QR2503
(VM DOWN Ⓛ : OFF)
CTL HAED
P1501 P4001
FROM VIDEO IC3301-16
IC6001-㉗ REC/PLAY 0.72Vp-p (V-RATE)
IC6001-㉘ REC/PLAY 5.0Vp-p (V-RATE)
PG SHIFTER
VR2001
Q6102 (NTSC : ON)
CASSETT SW
MOVING CONTACT
EJECT
CAS. DOWN
2.2K
3.3K
SUPPLY PHOTO SENSOR
SENSOR LED
TAKE UP PHOTO SENSOR
P1503 P6004
ON THE CASSETTE COMPARTMENT
REV MOTOR IS DECELERTED WHEN TAPE COME TO NEAR TAPE END
TO VIDEO AUDIO LP Ⓗ
QR6006
LOGIC
LP FWD VR2006
LP REV VR2018
SP FWD VR2011
SP REV VR2019
INPUT OUTPUT
6 PIN 7 PIN 1 PIN 2 PIN 3 PIN 4 PIN
NOTE : Z MEENS HIGH-IMPEDANCE
TO VIDEO S/FS Ⓗ
Q2003
QR6104
SSS Ⓛ
TO AUDIO A DUB P Ⓛ
TP2002 CTL
QR2002
QR2001
TP2002 PLAY 2.2Vp-p (V-RATE)
QR6006 SOLENOID PRE-DRIVE
Q6005
Q6004
SOLENOID DRIVE
QR6005 (REW : ON)
QR6004 (RESET : ON)
RESET
IC6001-㉜ REC/PLAY 5.0Vp-p (H RATE)
IC6001-㉙ PLAY 5.0Vp-p (V-RATE)
IC6001-㉚ STIL 0.2Vp-p (V-RAT
QR1002
QR6010
QR6007
SENSOR LED DRIVE
Q6008
SENSOR LED Ⓛ:SELECT A Ⓗ:SELECT B
TO AUDIO
TO VIDEO
FROM VIDEO
SERVICE MODE
CAP EC (ERROR VOLTAGE)
ENV SELECT
SLOW TRACKING V REF
AUTO TRACKING ENV.
VM DOWN Ⓛ
CTL ⊕
CTL ⊖
CAP FG2
CAP FG1
CYL PG M.M
NTSC Ⓛ
TAKE-UP PHOTO SENSOR
SUPPLY PHOTO SENSOR
CASSETTE SW (HALF Ⓗ DOWN Ⓜ EJECT Ⓛ)
REV MOTOR CONTROL 2
REV MOTOR CONTROL 1
REV MOTOR FWD Ⓛ /RVS Ⓗ
TAPE END Ⓛ
SLOW TRACKING
FORWARD Ⓛ/REVERSE Ⓗ
SP Ⓗ
AUDIO DUB Ⓗ
SLOW STILL STOP Ⓛ
CYL PG.FG
CYL EC (ERROR VOLTAGE)
CTL OUT
CTL (-)
CTL (+)
CTL AGC
SOLENOID ON Ⓛ
F.F / REW Ⓛ
RESET Ⓛ
D-REC Ⓗ
SP Ⓗ
NTSC Ⓛ
AUDIO HEAD SW
AUDIO MODE SELECT Ⓗ
AUDIO MUTE Ⓗ
FM AUDIO MUTE Ⓗ
AFTER RECORDING Ⓗ
VSS
ART V SYNC
ROTARY SW
HAED AMP SW
HEAD SW
FULL ERASE Ⓗ
VIDEO EE Ⓛ
POWER OFF Ⓗ
INSERT Ⓗ
SERIAL DATA
SERIAL CLOCK
SUB SW (REV DET SW)
T-REEL PULSE
S-REEL PULSE
PLAY POSITION Ⓛ
EJECT POSITION Ⓛ
STOP 1 POSITION Ⓛ /PAL SECAM Ⓗ
STOP 2 POSITION Ⓛ /S-TAB Ⓗ
SENSOR LED Ⓛ
REC START
SP Ⓗ
PAL Ⓗ
H.SW
INSERT Ⓗ
FLY ERASE Ⓗ
P4003
P1001
INPUT SELEC


IC7508
RESET IC
NON SW 5V
X6002
OSC 1
OSC 2
OSC
RST
STILL
(V-RATE)
IC6001 REC/PLAY
5.0Vp-p (V-RATE)
FULL
ERASE HEAD
TO POWER
TO DEMODULATOR
CS
AFC (S)
DATA
TO DEMODULATOR
VIDEO IC7401
CLOCK
TIMER TLK
TO FROM
VPS
TIMER CLK
TIMER LSN
IC7503
QR7504
CLK
DATA IN
DATA OUT
CS
RST
TO DEMODULATOR
DECODER
SYNC
TO VIDEO
IC7401
IO · CS
P7402 P7501
4 15
P7402 P7501
5 14
MODE SELECT SW
IC2002
VREF
+5V
+14V
LOGIC
Q6006
P6001
1 PLAY PO.
2 SVHS CASSETTE
3 GND
4 SOLENOID (−)
5 EJECT PO.
6 SOLENOID (+)
7 STOP1 PO.
8 STOP2 PO.
9 REEL PULSE (T)
10 SUB SW
11 S TAB
12 PHOTO SNS +B
13 REEL PULSE (S)
14 MOTOR GND
15 SENS LED
P1504
1 PLAY PO.
2 SVHS CASSETTE
3 GND
4 SOLENOID (−)
5 EJECT PO.
6 SOLENOID (+)
7 STOP1 PO.
8 STOP2 PO.
9 REEL PULSE (T)
10 SUB SW
11 S TAB
12 PHOTO SNS +B
13 REEL PULSE (S)
14 MOTOR GND
15 SENS LED
IC1501
TAKE-UP
REEL PULSE
IC1502
SUPPLY REEL
PULSE
MECHANISM CONNECTION C.B.A.

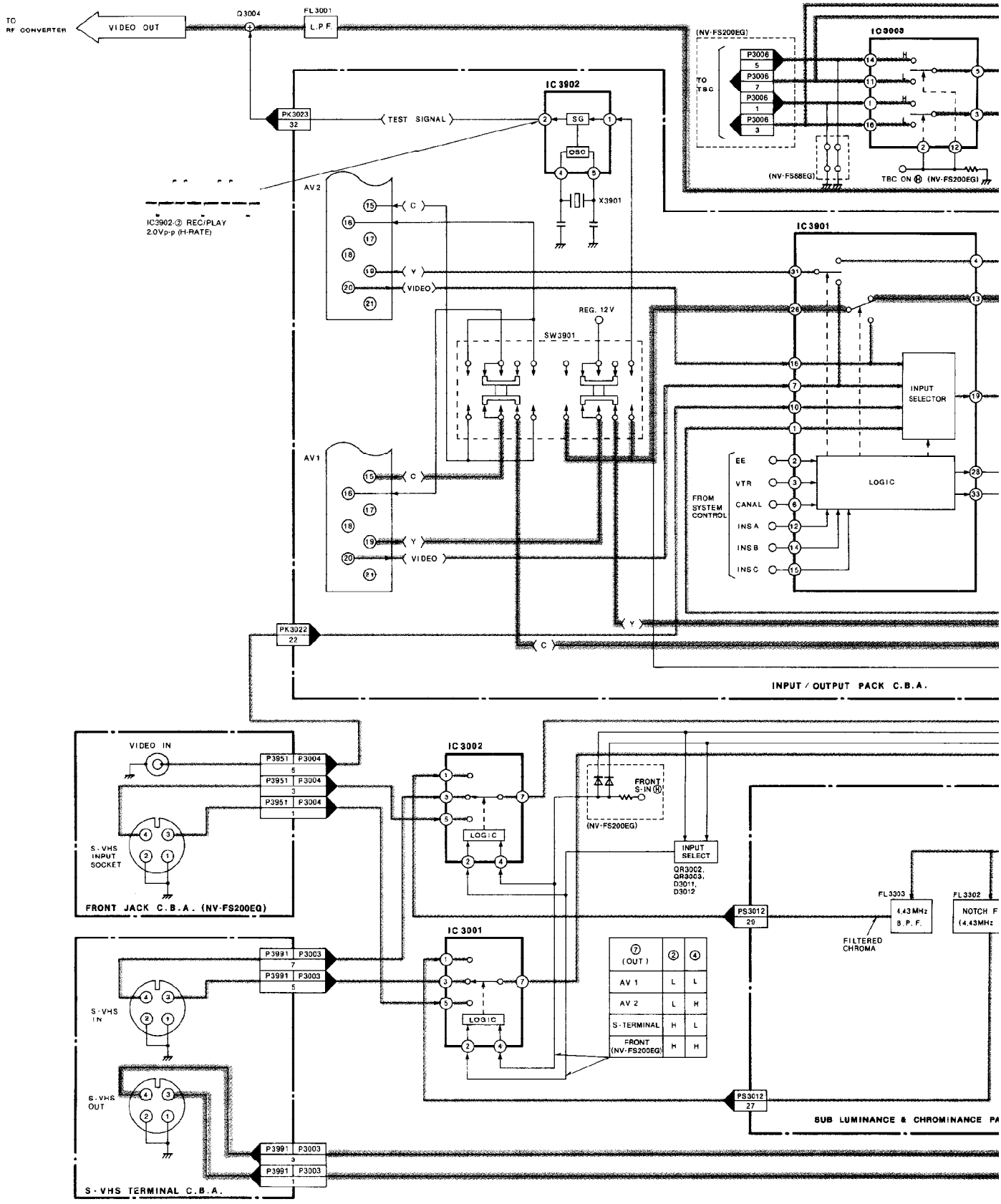

IC7505
IC7501
DP7501
+5V
RESET IC
RESET
DAC
POWER FAIL
S-CURVE
DATA OUT
CLK
TIMER CLK
DATA IN
CS
SYNC
IOCS
SERIAL DATA OUT
SERIAL CLOCK
SERIAL DATA IN
SEG.0
SEG.12
SEG.12
SEG.0
SEG.9
SEGMENT SIGNALS
GRID SIGNALS
QR7503
QR7502
QR7501
METER ADJ.
VR7501
SELECT SW
SVHS DET SW
SOLENOID
REV DET SW
SAFETY TAB SW
SENSOR LED
P50
P51
P53
P56
P57
P60
P61
P44
P43
P42
P41
P40
STILL
FF
REW
EJECT
STOP
POWER
INSERT
PLAY
A.DUB
REC
VR C.B.A.
A.SELECT
SP/LP
TIMER REC
TV/VTR
CH.DN
CH.UP
TRK.D
TRK.UP
EXT
PLOG
CLOCK
AFC/VPS
OTR OFF(-)
OTR OFF(+)
OTR ON(-)
OTR ON(+)
PAL/MESECAM
PRESET/FINE NORMAL
CLEAR
DOOR PANEL UNIT
BUZZER
OSC
X6003
IR
IR RECEIVER UNIT
+5V
32KHz
X0
X1
X7502 (BACK UP)
TIMER OSC
C7511
OSC 1
OSC 2
X7501
4.19MHz
IC7507
S IN
S OUT
CLK
IHT
X OUT
X IN
D2
RST
X7503
OSC
SHUTTLE 1
SHUTTLE 4
JOG 1
JOG 2
D0
S0
S1
S2



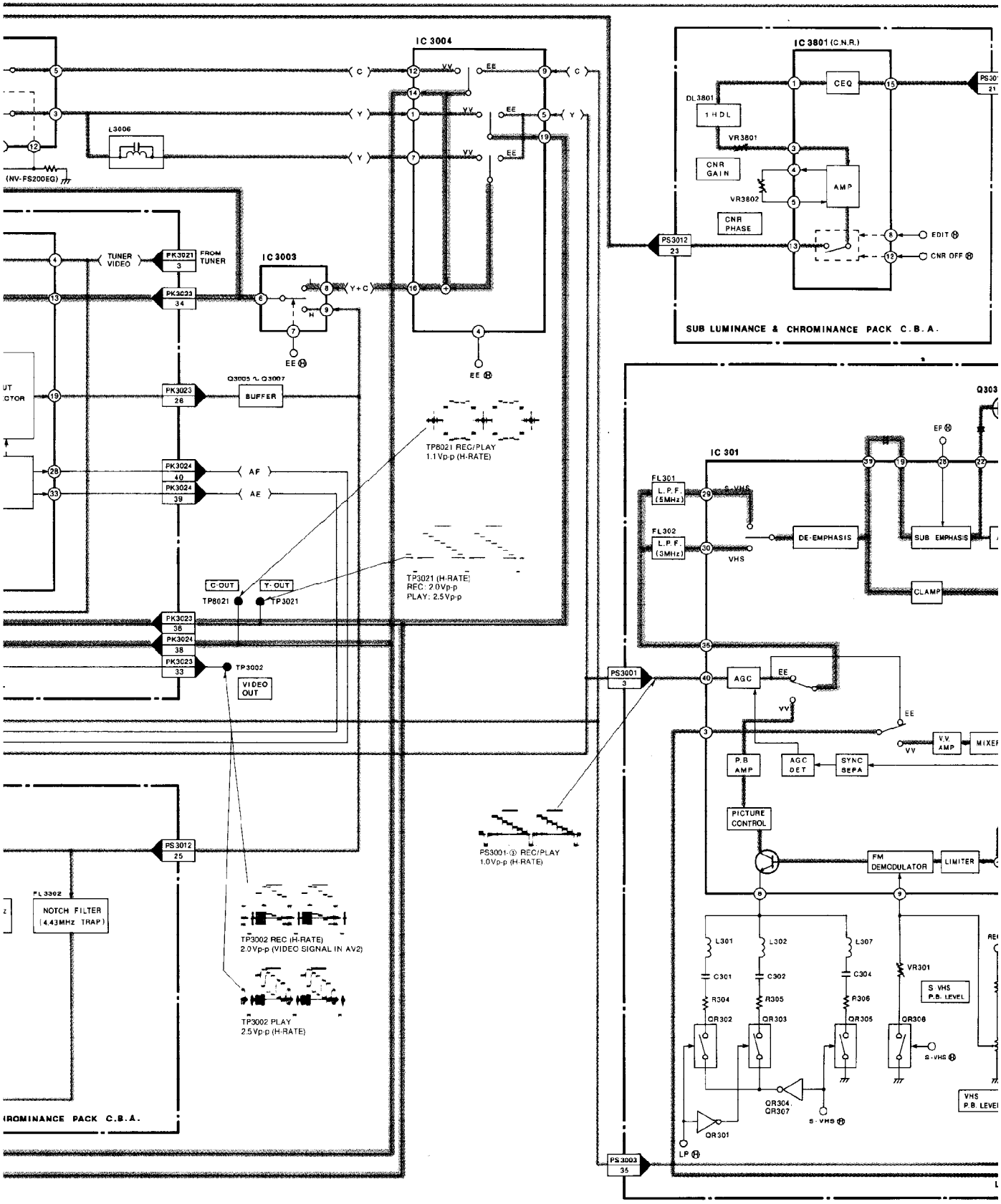


SYMBOL	TRUTH VALUE TABLE
INVERTER 	IN (a) H L OUT (b) L H
COMPARTOR	IN (a)/(b) (a)>(b) (a)<(b) OUT (c) H L
AND CIRCUIT	IN (a) L L H H (b) L H L H OUT (c) L L L H
OR CIRCUIT	IN (a) L L H H (b) L H L H OUT (c) L H H H
THREE STATES BUFFER 	IN (a) H L H or L (b) L L H OUT (c) H L ※ ※ High Impedance
TR. SW (NPN TYPE) 	BASE H L TR. SW ON OFF
TR. SW (PNP TYPE) 	BASE H L TR. SW OFF ON
R-S TYPE FLIP-FLOP 	IN (a) L L ⎍ (b) L ⎍ L OUT (c) ※ L H (d) ◆ H L ※ Initial condition is maintained. ◆ Initial condition is reversed.

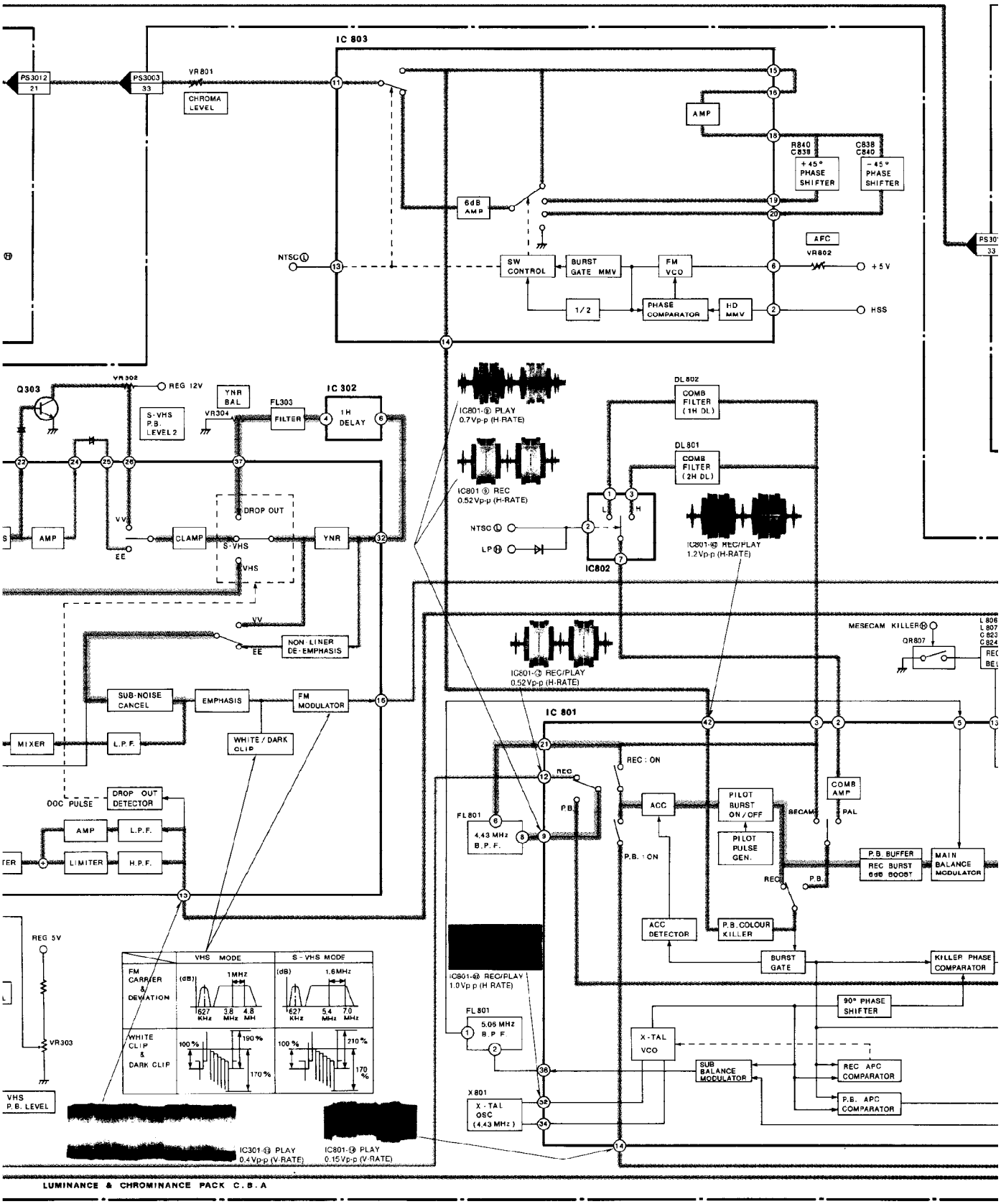
3-2. LUMINANCE & CHROMINANCE BLOCK DIAGRAM



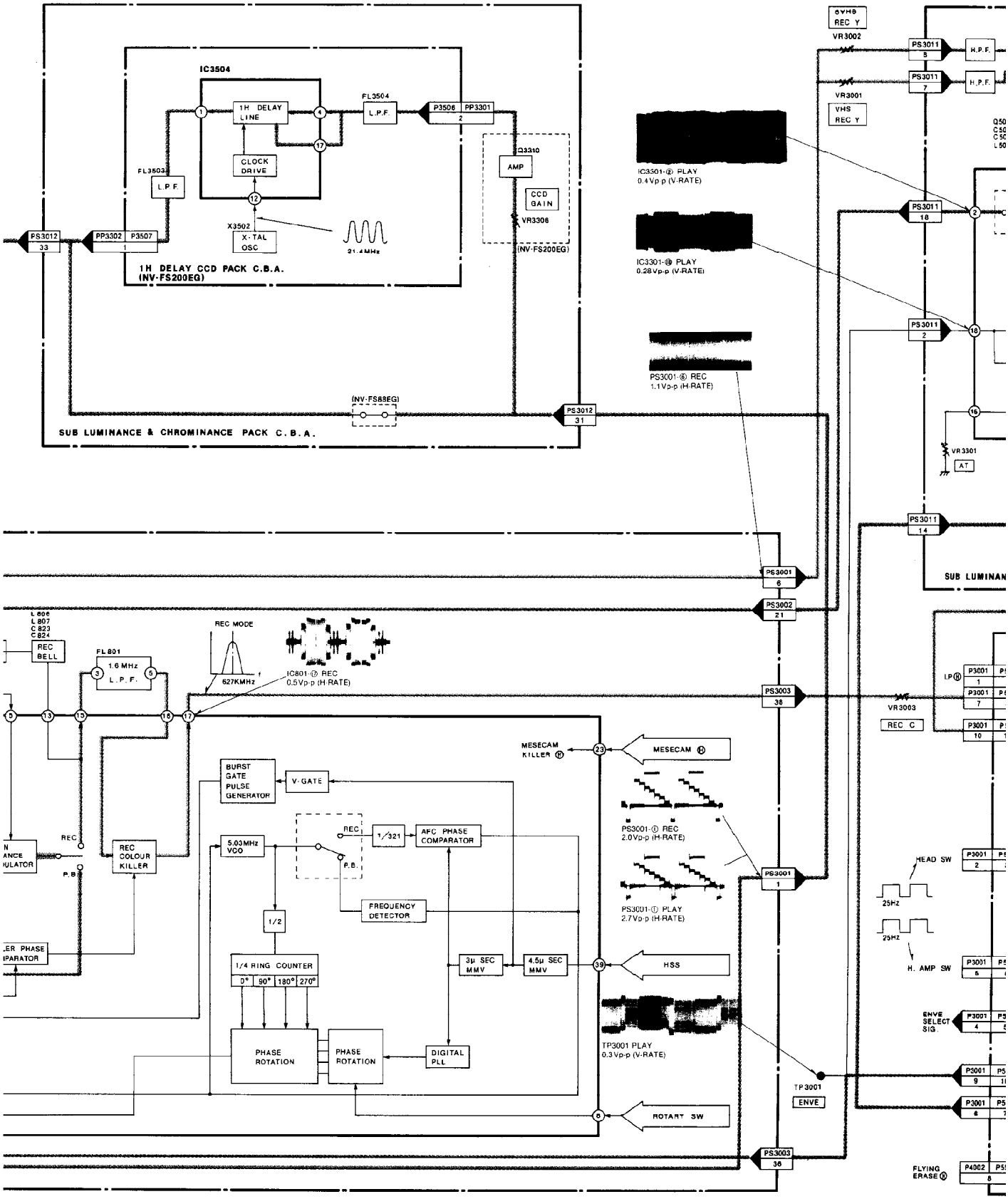
MAIN SIGNAL PATH IN REC MODE — MAIN SIGNAL PATH IN PLAYB

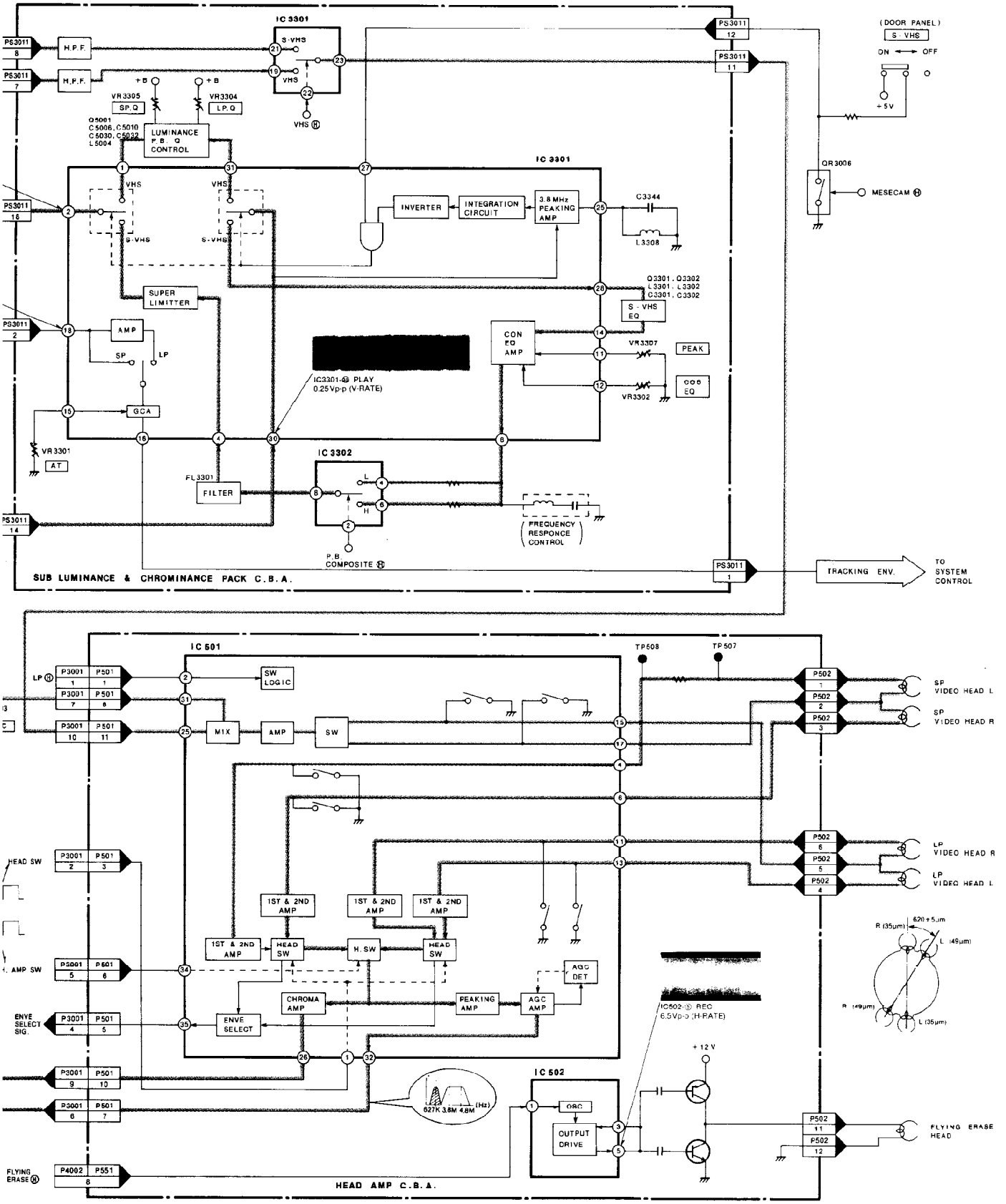


ıYBACK MODE

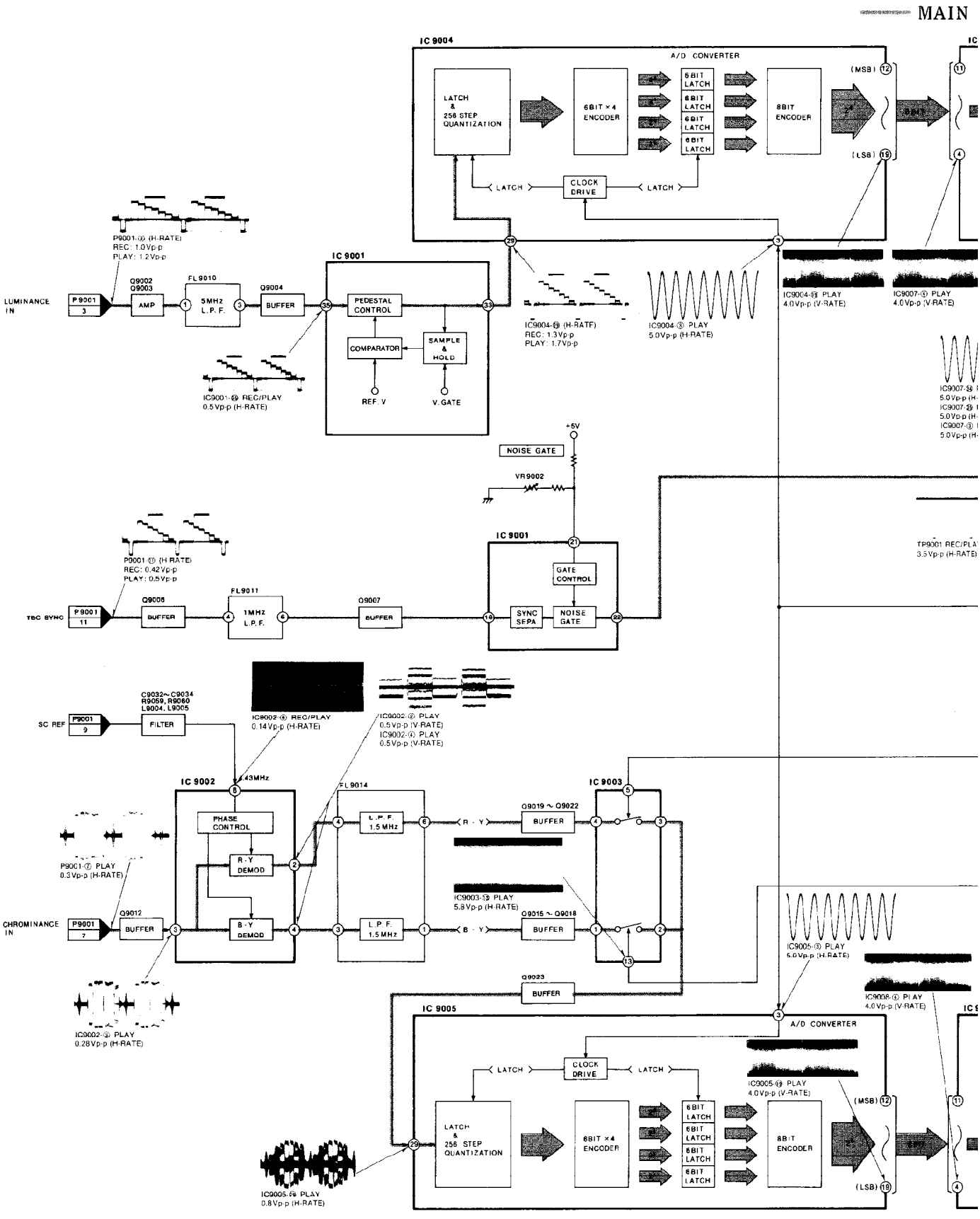


LUMINANCE & CHROMINANCE PACK C.B.A

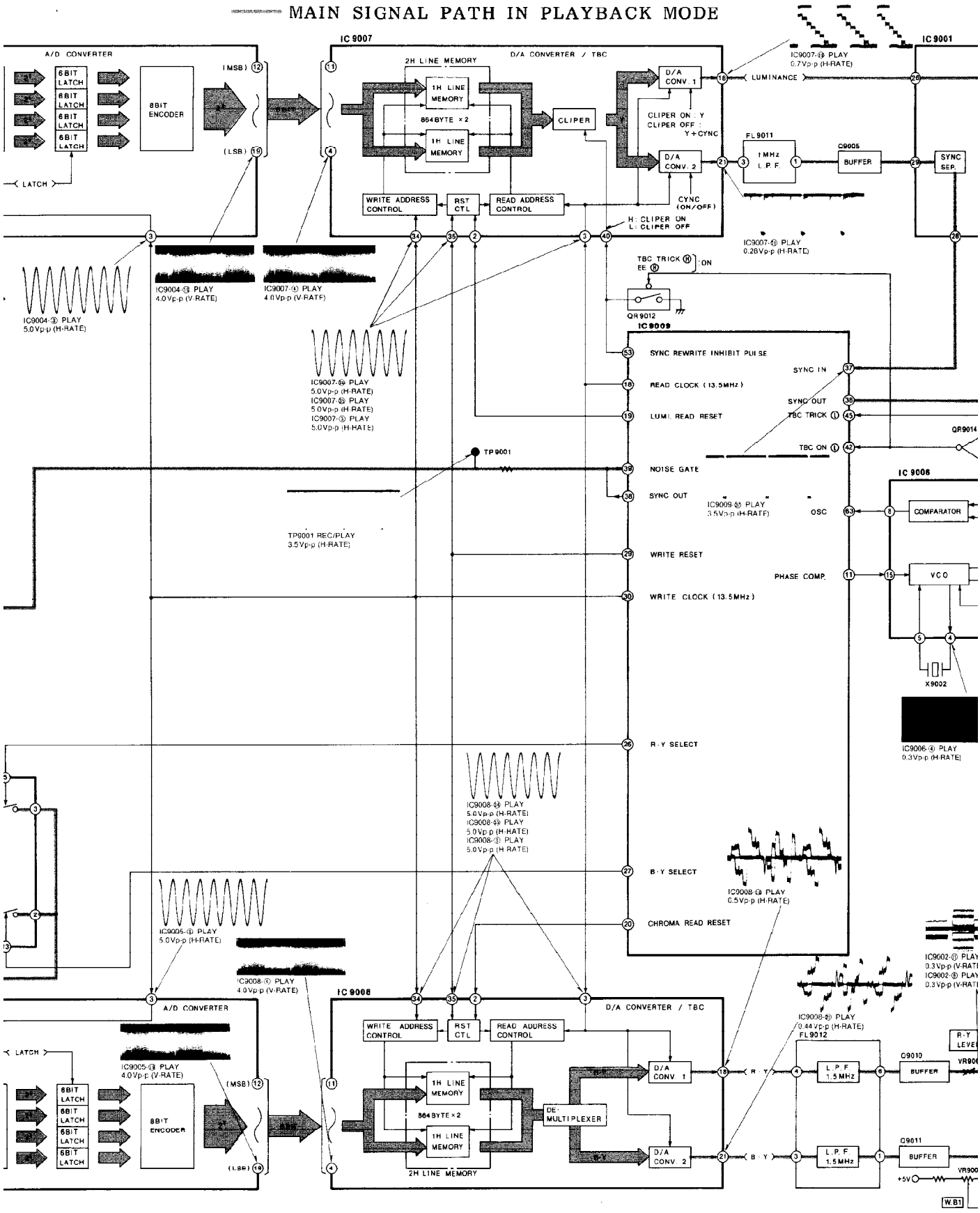

IC3504
1H DELAY LINE
FL3504
L.P.F.
P3506
PP3301
CLOCK DRIVE
FL3503
L.P.F.
X3502
X-TAL OSC
21.4MHz
Q3310
AMP
CCD GAIN
VR3306
(NV-FS200EG)
PS3012
33
PP3302
P3507
1H DELAY CCD PACK C.B.A.
(NV-FS200EG)
SUB LUMINANCE & CHROMINANCE PACK C.B.A.
(NV-FS88EG)
PS3012
31
6VHS REC Y
VR3002
VHS REC Y
VR3001
PS3011
8
H.P.F.
PS3011
7
H.P.F.
PS3011
18
PS3011
2
PS3011
14
VR3301
AT
IC3301-② PLAY
0.4Vp-p (V-RATE)
IC3301-⑩ PLAY
0.28Vp-p (V-RATE)
PS3001-⑥ REC
1.1Vp-p (H-RATE)
PS3001
6
PS3002
21
PS3003
38
SUB LUMINAN
REC MODE
627KMHz
IC801-⑰ REC
0.5Vp-p (H-RATE)
REC BELL
FL801
1.6 MHz
L.P.F.
VR3003
REC C
MESECAM KILLER
MESECAM
PS3001-① REC
2.0Vp-p (H-RATE)
PS3001-① PLAY
2.7Vp-p (H-RATE)
PS3001
1
BURST GATE PULSE GENERATOR
V-GATE
REC COLOUR KILLER
5.03MHz VCO
REC
P.B.
1/321
AFC PHASE COMPARATOR
FREQUENCY DETECTOR
1/2
1/4 RING COUNTER
0°
90°
180°
270°
3μ SEC MMV
4.5μ SEC MMV
HSS
PHASE ROTATION
PHASE ROTATION
DIGITAL PLL
ROTARY SW
TP3001 PLAY
0.3Vp-p (V-RATE)
TP3001
ENVE
PS3003
36
HEAD SW
25Hz
25Hz
H. AMP SW
ENVE SELECT SIG.
FLYING ERASE
P4002

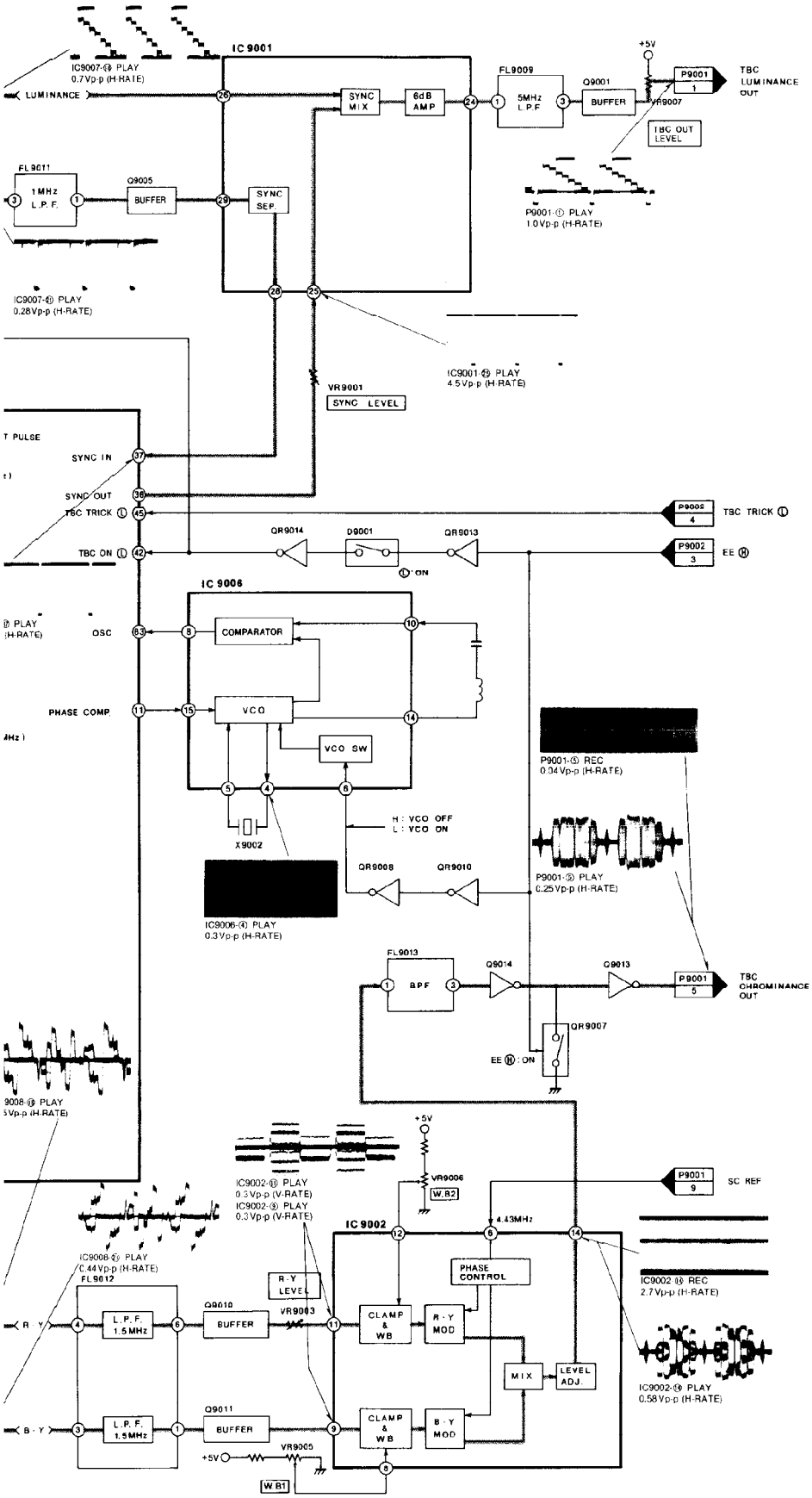

IC 3301
S-VHS
VHS
H.P.F.
+B
VR3305
SP.Q
VR3304
LP.Q
LUMINANCE F.B. Q CONTROL
Q5001
C5006, C5010
C5030, C5032
L5004
VHS Ⓗ
PS3011
8
7
2
18
12
11
1
14
(DOOR PANEL)
S-VHS
ON ⟷ OFF
+5V
QR3006
MESECAM Ⓗ
INVERTER
INTEGRATION CIRCUIT
3.8 MHz PEAKING AMP
C3344
L3308
Q3301, Q3302
L3301, L3302
C3301, C3302
S-VHS EQ
SUPER LIMITTER
AMP
SP
LP
GCA
VR3301
AT
FL3301
FILTER
IC3301-㉘ PLAY
0.25Vp-p (V-RATE)
CON EQ AMP
VR3307
PEAK
VR3302
COC EQ
IC 3302
FREQUENCY RESPONCE CONTROL
P.B. COMPOSITE Ⓗ
SUB LUMINANCE & CHROMINANCE PACK C.B.A.
TRACKING ENV.
TO SYSTEM CONTROL
IC 501
TP508
TP507
LP Ⓗ
P3001
P501
SW LOGIC
MIX
AMP
SW
P502
SP VIDEO HEAD L
SP VIDEO HEAD R
LP VIDEO HEAD R
LP VIDEO HEAD L
HEAD SW
AMP SW
ENVE SELECT SIG.
1ST & 2ND AMP
HEAD SW
H. SW
CHROMA AMP
ENVE SELECT
PEAKING AMP
AGC AMP
AGC DET
IC502-㉓ REC
6.5Vp-p (H-RATE)
+12V
IC 502
OSC
OUTPUT DRIVE
627K 3.8M 4.8M (Hz)
FLYING ERASE Ⓗ
P4002
P551
FLYING ERASE HEAD
HEAD AMP C.B.A.
R (35μm)
620±5μm
L (49μm)
R (49μm)
L (35μm)

3-3. TBC BLOCK DIAGRAM



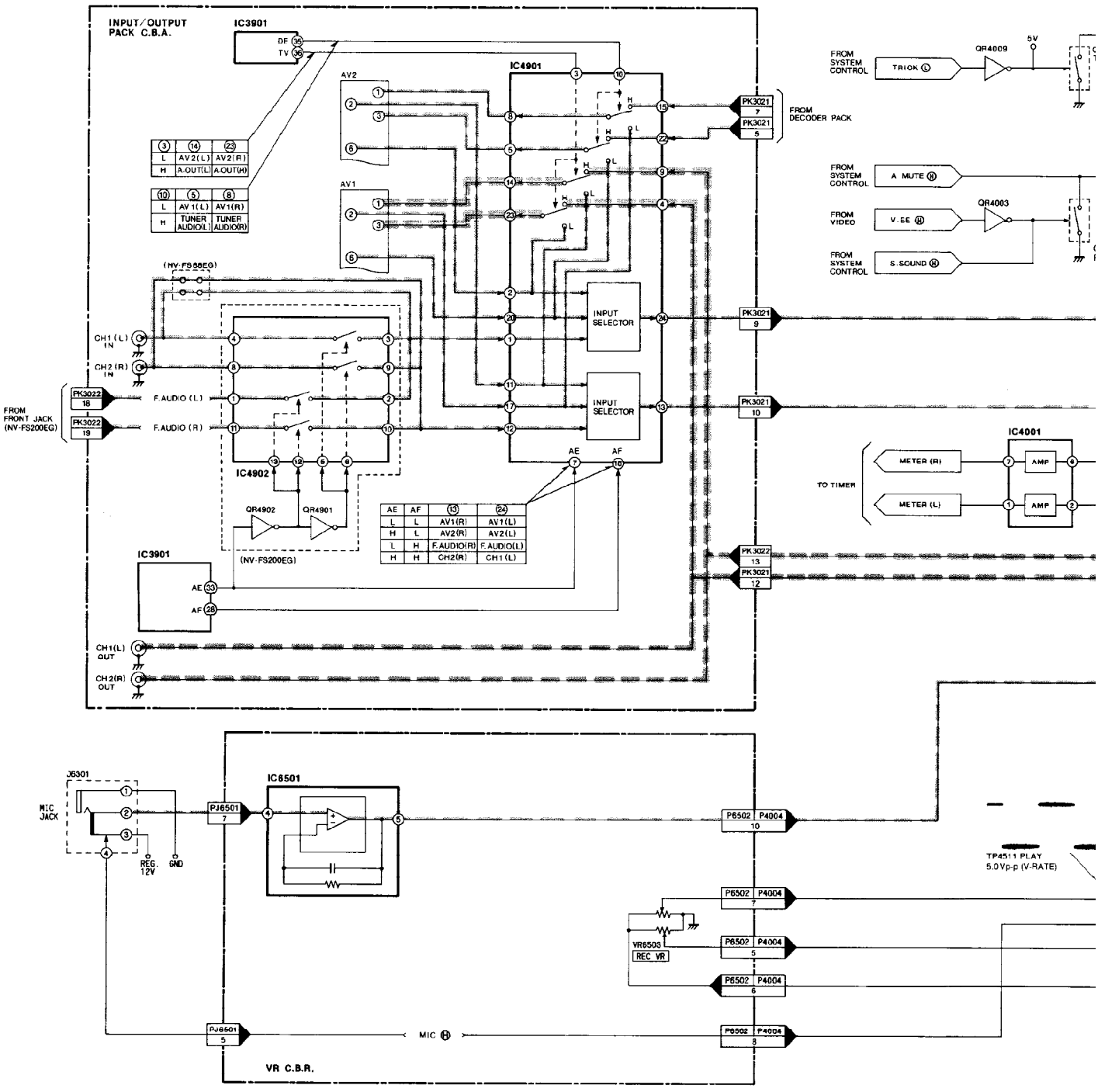
MAIN SIGNAL PATH IN PLAYBACK MODE



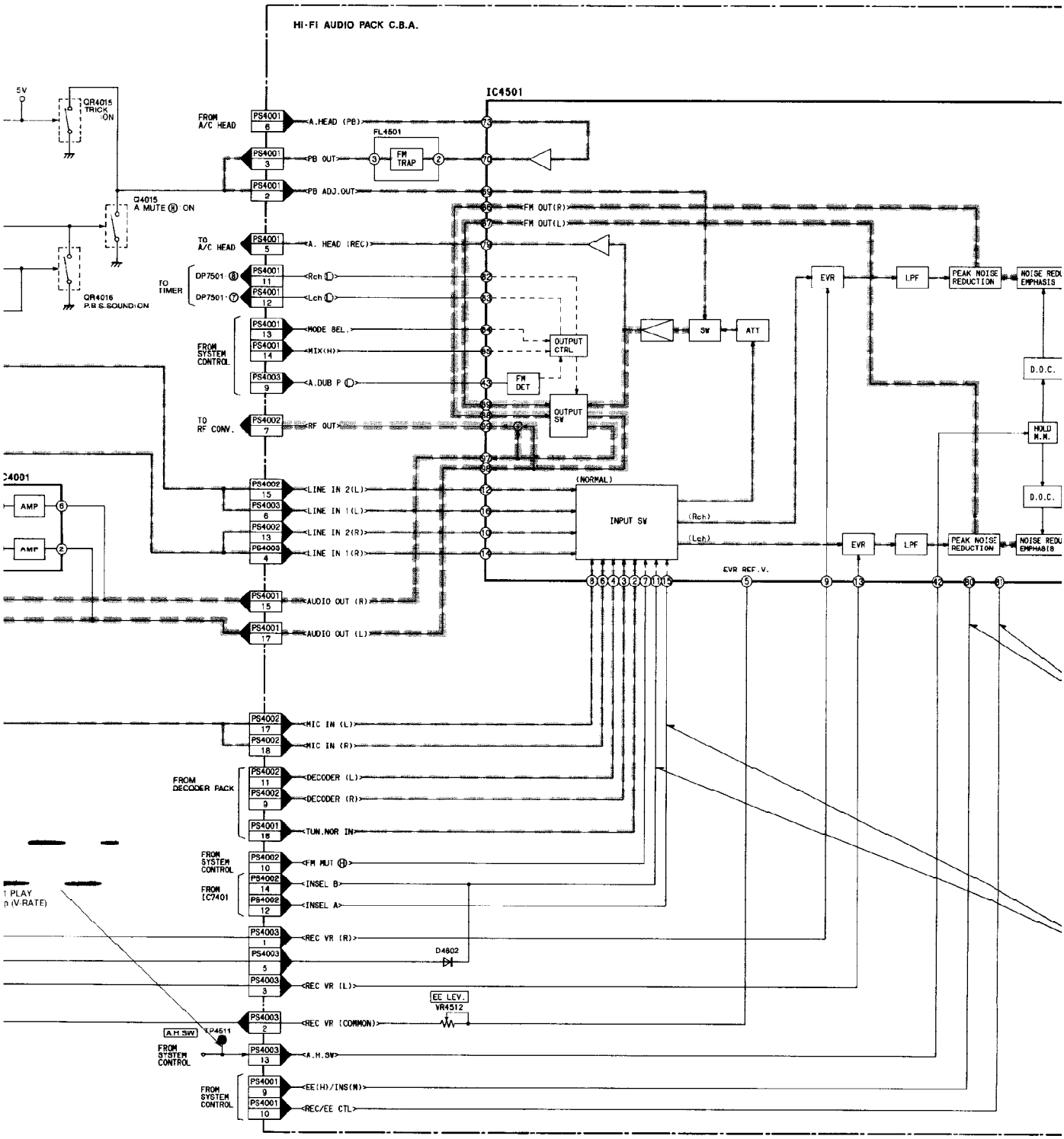

IC 9001
IC9007-⑰ PLAY
0.7Vp-p (H-RATE)
LUMINANCE
SYNC MIX
6dB AMP
FL9009
5MHz L.P.F
Q9001
BUFFER
+5V
P9001 1
TBC LUMINANCE OUT
VR9007
TBC OUT LEVEL
P9001-① PLAY
1.0Vp-p (H-RATE)
FL9011
1MHz L.P.F.
Q9005
BUFFER
SYNC SEP.
IC9007-⑮ PLAY
0.28Vp-p (H-RATE)
IC9001-⑲ PLAY
4.5Vp-p (H-RATE)
VR9001
SYNC LEVEL
T PULSE
SYNC IN
SYNC OUT
TBC TRICK Ⓛ
TBC ON Ⓛ
QR9014
D9001
QR9013
Ⓛ : ON
P9002 4
TBC TRICK Ⓛ
P9002 3
EE Ⓦ
IC 9006
OSC
COMPARATOR
PHASE COMP.
VCO
VCO SW
X9002
H : VCO OFF
L : VCO ON
QR9008
QR9010
IC9006-⑭ PLAY
0.3Vp-p (H-RATE)
P9001-⑤ REC
0.04Vp-p (H-RATE)
P9001-② PLAY
0.25Vp-p (H-RATE)
FL9013
BPF
Q9014
Q9013
P9001 5
TBC CHROMINANCE OUT
QR9007
EE Ⓦ : ON
+5V
VR9006
W.B2
P9001 9
SC REF
IC9002-⑪ PLAY
0.3Vp-p (V-RATE)
IC9002-⑧ PLAY
0.3Vp-p (V-RATE)
IC 9002
4.43MHz
PHASE CONTROL
IC9002 ⑩ REC
2.7Vp-p (H-RATE)
IC9008-⑫ PLAY
0.44Vp-p (H-RATE)
FL9012
R-Y LEVEL
R-Y
L.P.F. 1.5MHz
Q9010
BUFFER
VR9003
CLAMP & WB
R-Y MOD
MIX
LEVEL ADJ.
IC9002-⑥ PLAY
0.58Vp-p (H-RATE)
B-Y
L.P.F. 1.5MHz
Q9011
BUFFER
CLAMP & WB
B-Y MOD
+5V
VR9005
W.B1

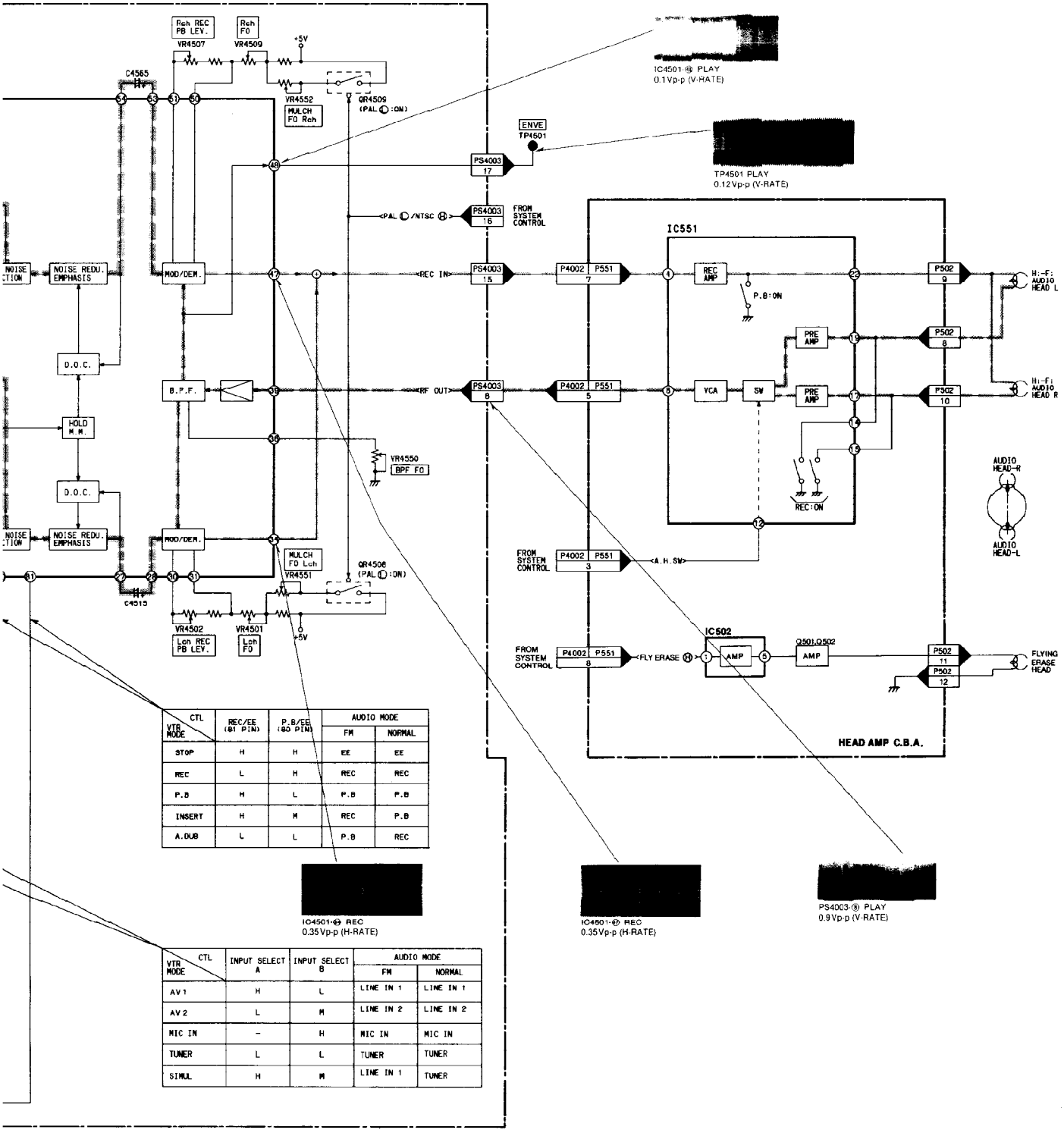
3-4. Hi-Fi AUDIO BLOCK DIAGRAM

MAIN SIGNAL PAT



AL PATH IN REC MODE — — MAIN SIGNAL PATH IN PLAYBACK MODE



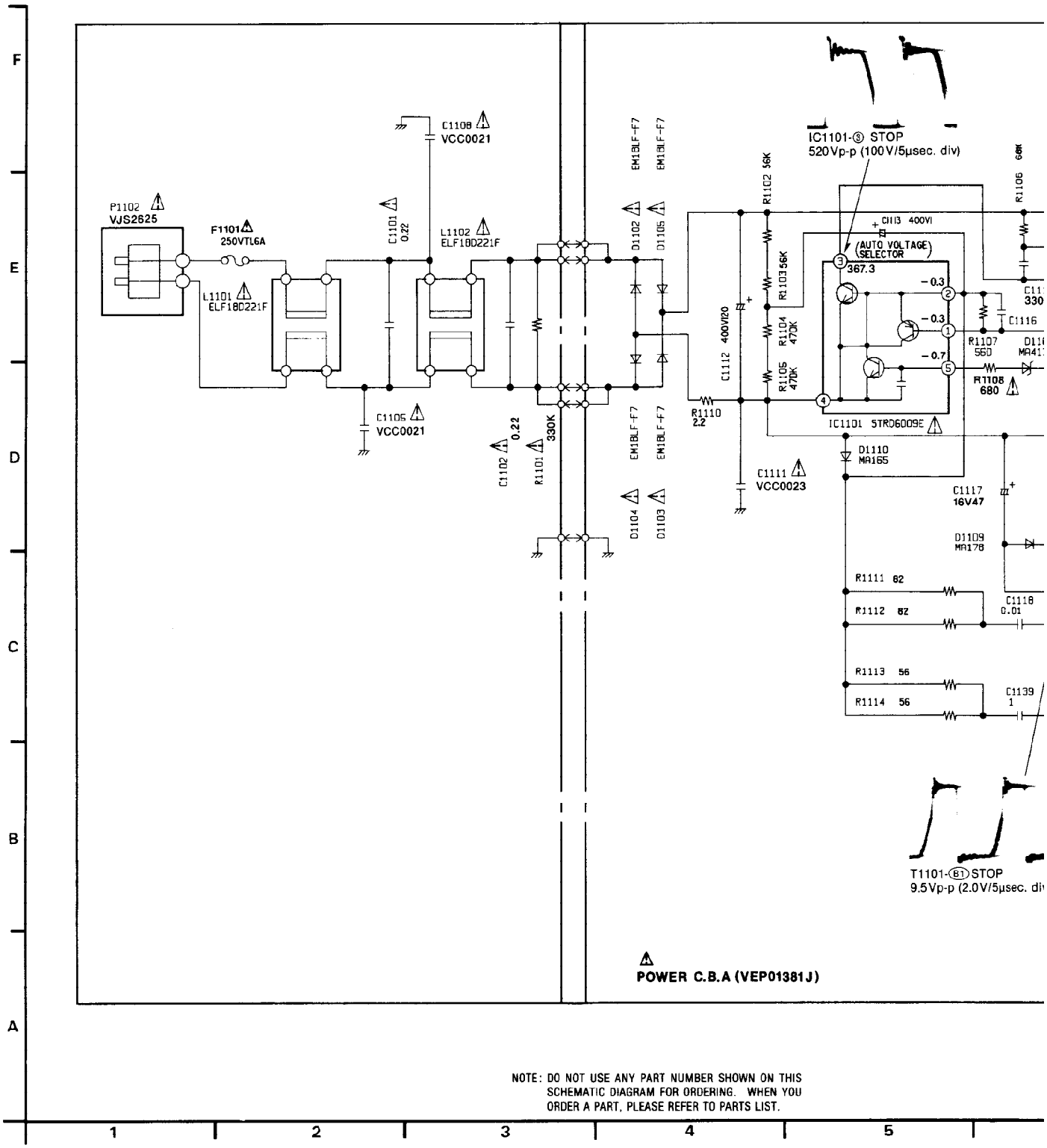


CTL / VTR MODE	REC/EE (61 PIN)	P.B/EE (60 PIN)	AUDIO MODE	
			FM	NORMAL
STOP	H	H	EE	EE
REC	L	H	REC	REC
P.B	H	L	P.B	P.B
INSERT	H	H	REC	P.B
A.DUB	L	L	P.B	REC

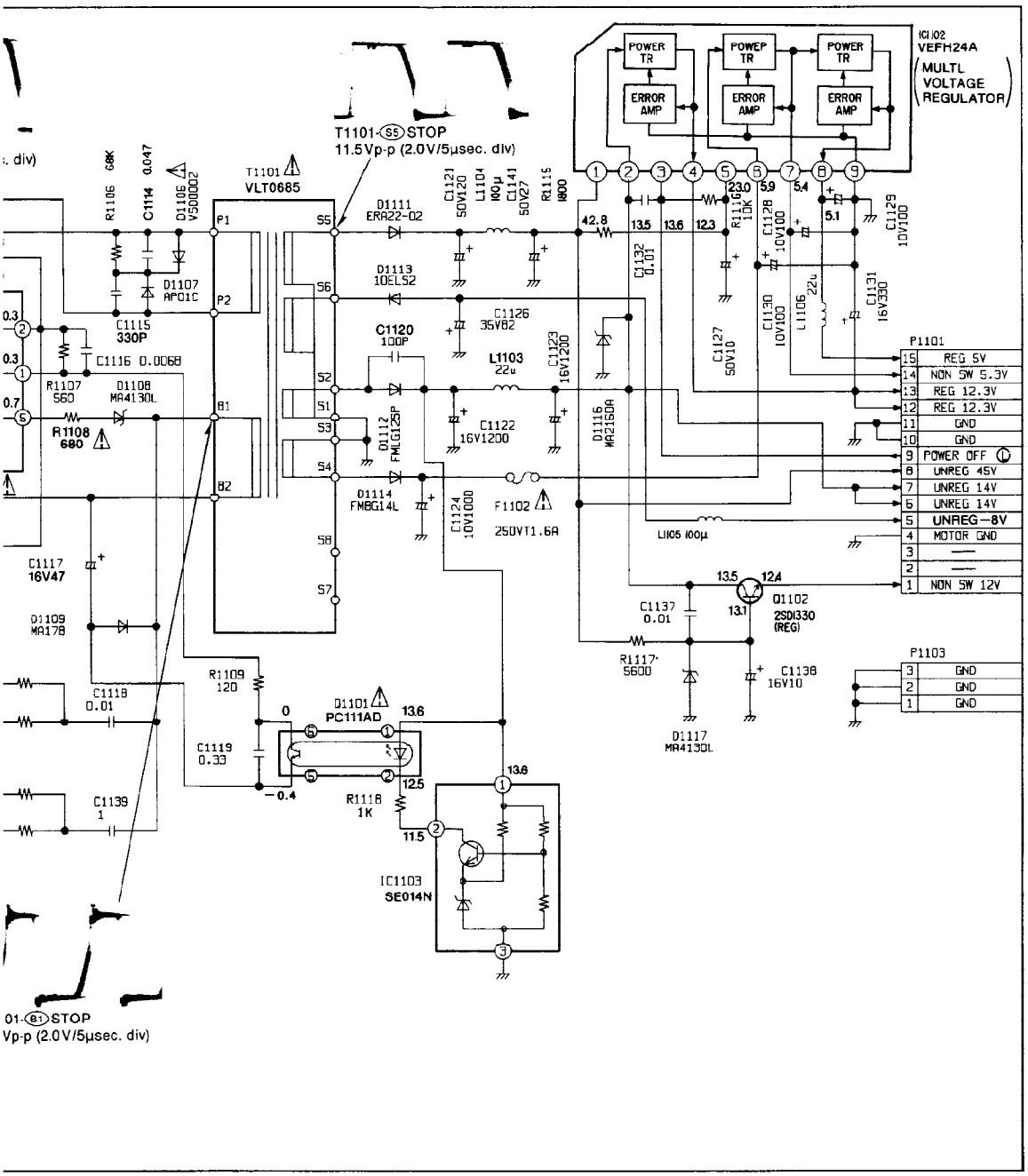
CTL / VTR MODE	INPUT SELECT A	INPUT SELECT B	AUDIO MODE	
			FM	NORMAL
AV 1	H	L	LINE IN 1	LINE IN 1
AV 2	L	H	LINE IN 2	LINE IN 2
MIC IN	–	H	MIC IN	MIC IN
TUNER	L	L	TUNER	TUNER
SIMUL	H	H	LINE IN 1	TUNER

SECTION 4
SCHEMATIC DIAGRAM

4-1. POWER SCHEMATIC DIAGRAM



NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.



IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

NOTE 1. WHEN MEASURE THE VOLTAGE OR WAVEFORM ON THE POWER TRANSFORMER CIRCUIT, SET THE GND TERMINAL OF MEASURING POINT AS FOLLOWS.
PRIMARY SIDE ..... IC1101-(4)
SECONDARY SIDE ... TP GND OF MAIN C.B.A.

NOTE 2. THE DC VOLTAGE INDICATED IN PRIMARY SIDE IS SHOWN THE VOLTAGE WHEN INPUT AC IS 220V.

SYSTEM CONTROL & SERVO ICs DC VOLTAGE CHART (SP MODE)

REF. NO.	IC2001										IC2002									
MODE	1	2	3	4	5	6	7	8			1	2	3	4	5	6	7	8		
STOP 2	2.4	4.9	0	0	0	5.0	0	5.0			2.5	2.5	2.5	0	2.4	4.3	3.8	5.0		
PLAY	2.4	4.9	0	0	0	5.0	0	5.0			2.5	2.5	2.5	0	2.4	4.2	3.8	5.0		
REC	2.4	4.9	0	0	0	5.0	0	5.0			2.5	2.5	2.5	0	2.5	4.2	3.8	4.9		
F.F.	2.4	4.9	0	0	0	5.0	0	5.0			2.5	2.5	2.5	0	2.5	2.0	2.5	5.0		
REW	2.4	4.9	0.1	0	0	5.0	0	5.0			2.5	2.5	2.5	0	2.5	1.8	2.5	5.0		

REF. NO.	IC2003																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP 2	0	0	0	0	0	5.0	0	1.7	1.7	1.3	1.1	0.3	0	5.0						
PLAY	0	0	0	0	0	5.0	0	3.3	3.3	3.3	2.7	0.3	0	5.0						
REC	0	0	0	0	0	5.0	0	0.9	0.9	0.9	0.2	0.3	0	5.0						
F.F.	0	0	0	0	0	5.0	0	1.2	1.2	1.2	0.6	0.3	0	5.0						
REW	0	0	0	0	0	5.0	0	0	1.2	1.2	0.6	0.3	0	5.0						

REF. NO.	IC2901																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
STOP 2	11.7	11.7	0.1	1.2	0	2.5	2.4	2.5	2.4	2.6	5.0	3.6	3.7	3.8	0.8	12.0	11.7	0.1		
PLAY	10.0	10.0	0.1	1.1	0	2.5	2.4	2.5	2.4	2.6	5.0	3.7	3.7	0	1.1	10.5	10.0	0.1		
REC	10.0	10.0	0.1	1.2	0	2.5	2.4	2.5	2.4	2.6	5.0	3.8	3.8	3.7	1.1	10.5	10.0	0.1		
F.F.	13.4	13.4	0	0.1	0	2.5	4.2	2.4	2.5	1.3	5.0	4.1	4.1	3.8	5.0	13.3	13.4	0		
REW	13.4	13.4	0	0.1	0	2.5	4.2	2.4	2.5	1.3	5.0	4.1	4.1	3.8	5.0	13.3	13.4	0		

REF. NO.	IC6001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP 2	0	0	0.3	5.0	5.0	5.0	2.0	0	0	4.4	5.0	0	0	0	0	2.5	0	3.2	0	0
PLAY	0	0	0.3	5.0	5.0	5.0	2.0	0	3.9	3.7	5.0	0	0	0	0	2.5	3.2	3.2	4.8	0
REC	0	0	0.3	5.0	5.0	5.0	2.0	0	4.5	3.0	5.0	0	0	0	0	2.5	3.2	3.2	4.9	0
F.F.	0	0.5	0.5	4.7	5.0	5.0	2.0	0	0.1	5.0	5.0	0	0	0.1	0	2.5	3.2	3.2	1.8	0
REW	0	0.5	0.5	4.7	5.0	5.0	2.0	0	0	5.0	5.0	0	0	0	0	2.5	3.2	3.2	2.6	0

REF. NO.	IC6001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP 2	5.0	5.0	0.1	2.4	1.7	2.5	2.4	2.4	0	2.5	2.4	2.6	4.9	0	0	0	2.5	2.5	0	2.4
PLAY	5.0	5.0	2.4	2.4	3.3	2.5	2.5	2.4	0	2.5	2.5	2.5	4.9	0	0	0	2.5	2.5	0	2.7
REC	5.0	5.0	2.5	2.4	0.9	2.4	2.4	2.4	0	2.5	0	2.6	4.9	2.3	2.7	0	2.5	2.5	0	0
F.F.	5.0	5.0	2.5	4.2	1.2	2.5	2.5	2.4	0	2.5	2.5	2.6	4.9	2.0	0	0	2.5	2.5	0	2.2
REW	5.0	5.0	2.4	4.2	1.2	2.5	2.4	2.4	0	2.5	2.5	2.6	4.9	0	0	0	2.5	2.5	0	2.8

REF. NO.	IC6001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP 2	2.4	5.0	1.1	2.8	0	4.7	4.9	5.0	0	3.8	4.0	5.0	0	0	5.0	5.0	0	0	0	4.3
PLAY	2.4	5.0	1.3	2.4	2.9	4.7	5.0	5.0	0	3.8	4.4	5.0	0	0	5.0	5.0	0	0	0	5.0
REC	0	0	1.1	2.5	0	4.7	4.9	5.0	0	3.8	3.7	5.0	0	0	5.0	5.0	0	0	0	3.0
F.F.	2.4	5.0	4.9	0	0	4.4	5.0	5.0	0	2.2	3.9	5.0	0	0	5.0	5.0	0	0	0.1	0
REW	2.4	5.0	4.9	0	0	4.4	5.0	5.0	0	2.7	4.4	5.0	0	0	5.0	5.0	0	0	0	0

REF. NO.	IC6001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP 2	5.0	2.0	4.2	4.2	0	0	0	0	0	0	0	0	0	4.9	4.9	4.9	5.0	0	5.0	0
PLAY	5.0	0	4.2	4.0	0	0	0	0	0	5.0	0	0	5.0	0	4.9	4.9	0	5.0	5.0	0
REC	5.0	0	4.2	0	0	5.0	4.9	4.9	4.9	5.0	0	0	5.0	0	4.9	4.9	5.0	0	5.0	0
F.F.	5.0	0	4.2	4.4	0	0	0	0	0	5.0	0	0	5.0	4.9	4.9	0	5.0	0	5.0	0
REW	5.0	5.0	4.1	4.3	0	0	0	0	0	5.0	0	0	5.0	4.9	4.9	0	5.0	0	5.0	0

REF. NO.	IC8001																			
MODE	81	82	83	84																
STOP 2	0	–	–	4.2																
PLAY	0	–	–	4.2																
REC	0	–	–	4.2																
F.F.	0	–	–	4.8																
REW	0	–	–	4.8																

REF. NO.	IC6002																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP 2	0	5.0	5.0	5.0	0.5	5.0	5.0	0	0.3	5.0	0.3	5.0	0	5.0	0	5.0				
PLAY	0	5.0	5.0	5.0	0.5	5.0	5.0	0	0.3	5.0	0.3	5.0	0	4.7	0	5.0				
REC	0	5.0	5.0	5.0	0.5	5.0	5.0	0	0.3	5.0	0.3	5.0	0	4.7	0	5.0				
F.F.	0	0	2.3	5.0	0.5	5.0	5.0	0	1.7	5.0	0.5	4.7	1.5	4.7	5.0	5.0				
REW	0	0	5.0	5.0	0.5	5.0	5.0	0	0.3	5.0	0.3	4.7	0.5	4.4	5.0	5.0				

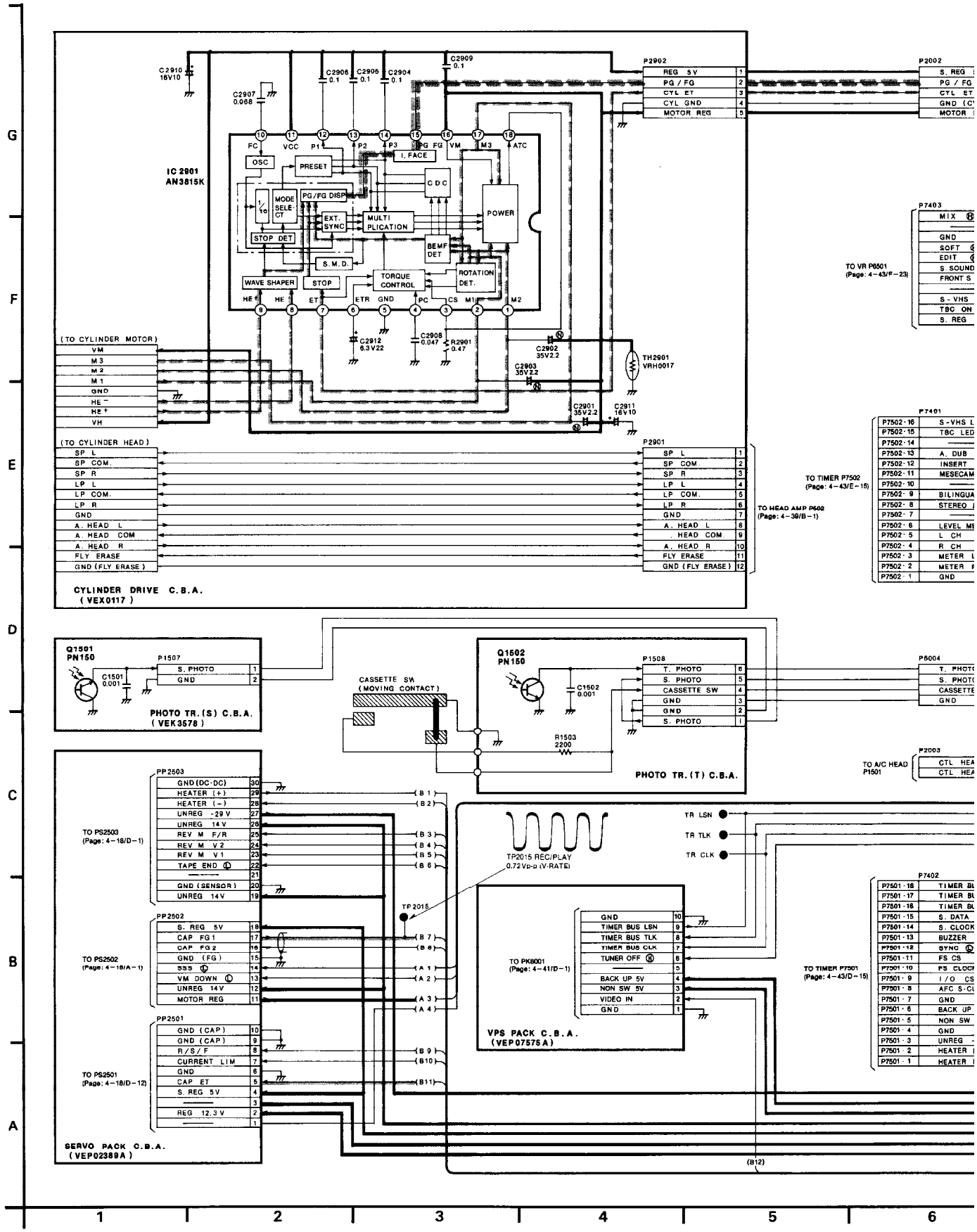
REF. NO.	IC6003																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
STOP 2	0	0.1	0	0	4.4	0	5.0	0	4.9	0	0	0.1	0.1	4.9	1.9	0	0.1	5.0		
PLAY	0	0.1	0	0	1.5	0	5.0	0	5.0	0	0	0.1	0.1	4.9	1.9	0	0.1	5.0		
REC	0	0.3	0	5.0	3.2	0	5.0	0	4.9	0.1	0	4.3	4.9	0	1.9	0	0.1	5.0		
F.F.	0	0.1	0	0	0	0	5.0	0	5.0	0	0	0.1	0.1	4.9	1.9	0	0	5.0		
REW	0	0.1	0	0	0	0	5.0	0	5.0	0	0	0.1	0.1	4.9	1.9	3.9	3.8	5.0		

REF. NO.	IC6004																			
MODE	1	2	3																	
STOP 2	4.2	4.8	0																	
PLAY	4.2	4.8	0																	
REC	4.2	4.8	0																	
F.F.	4.2	4.8	0																	
REW	4.2	4.8	0																	

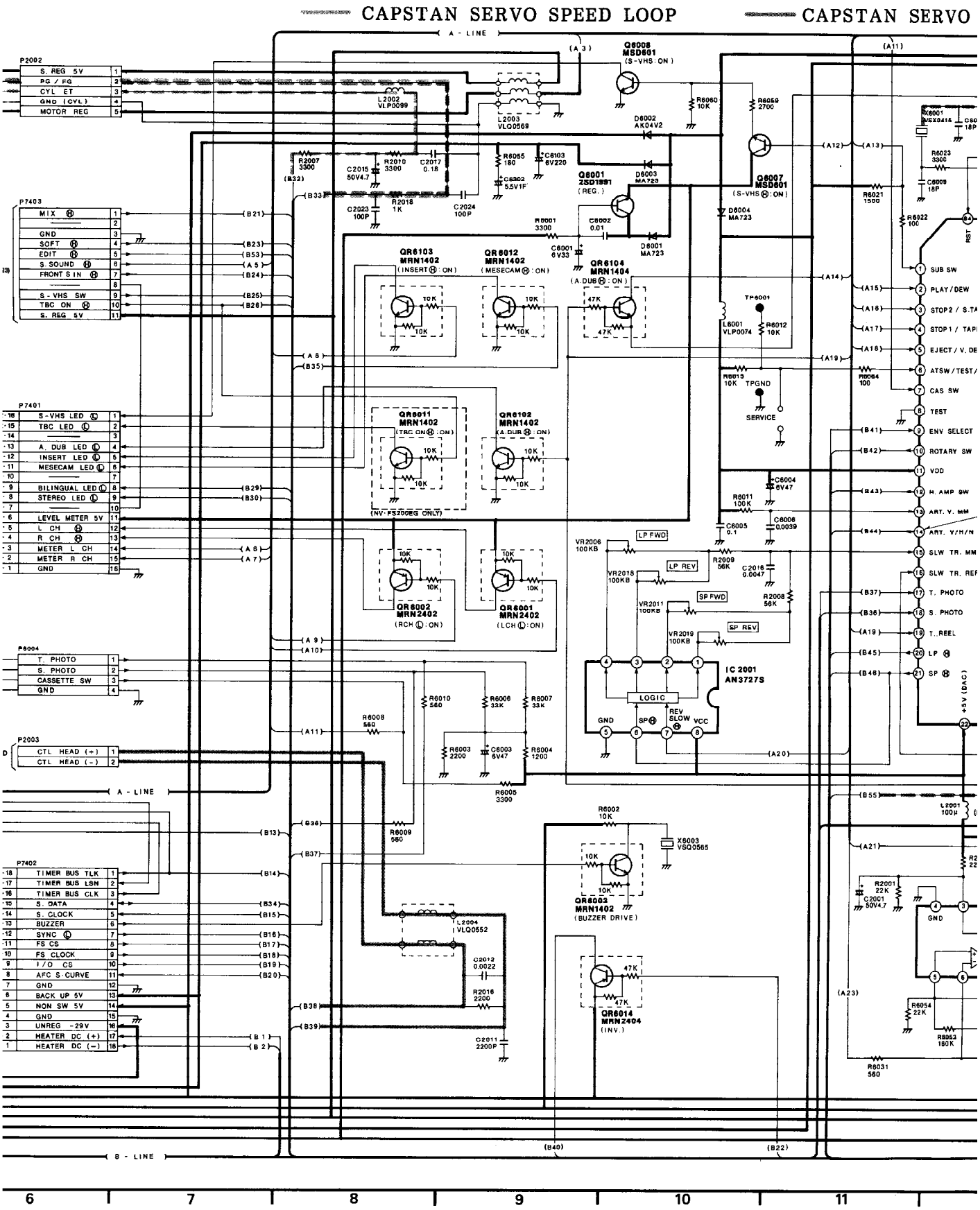
SYSTEM CONTROL & SERVO TRANSISTORs DC VOLTAGE CHART (SP MODE)

REF. NO.	Q2001			Q2002			Q2003			Q6001			Q6003			Q6004		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP 2	5.0	5.3	5.7	1.7	0	1.0	0	5.0	0	4.9	5.0	5.7	13.4	13.4	5.0	0.7	13.4	0.8
PLAY	5.0	5.3	5.7	3.3	0	2.7	0	0	0.6	4.9	5.0	5.7	13.4	13.4	4.9	0.3	13.4	0.4
REC	5.0	5.3	5.7	0.9	0	0.2	0	0	0.6	4.9	5.0	5.7	13.4	13.4	5.6	0.7	13.4	0.9
F.F.	5.0	5.3	5.7	1.3	0	0.6	0	0	0.6	4.9	5.0	5.7	13.3	13.3	4.9	0.7	13.3	0.8
REW	5.0	5.3	5.7	1.3	0	0.6	0	0	0.6	4.9	5.0	5.7	13.3	13.3	4.9	0.6	13.4	0.7
REF. NO.	Q6005			Q6006			Q6007			Q6008			Q6101			Q6102		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP 2	−0.1	0.2	−0.1	0.4	13.4	0.3	4.2	4.9	4.8	0.7	0	0	4.3	4.8	0.3	5.0	4.6	4.9
PLAY	0	0.2	0	0.5	13.4	0.3	4.2	4.9	4.8	0	0	0.7	4.3	4.8	0.3	5.0	4.7	4.9
REC	0	1.3	0	0.5	13.4	0.3	4.2	4.9	4.8	0	0	0.7	4.5	4.8	0.3	5.0	4.7	4.9
F.F.	0	0.3	0	0.6	13.4	0.3	4.2	4.9	4.8	0	0	0.7	4.2	4.7	0.3	5.0	4.3	4.9
REW	0	0.7	0	0.7	13.4	0.6	4.2	4.9	4.8	0	0	0.7	3.7	4.7	0.2	5.0	4.3	4.9
REF. NO.	QR2001			QR2002			QR6001			QR6002			QR6003			QR6004		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP 2	0	0	4.9	0	0	4.9	4.9	4.9	0	4.9	4.9	0	0	0	4.8	1.4	0.1	4.2
PLAY	0	0	4.9	0	0	4.9	4.9	4.9	0	4.9	4.9	0	0	0	4.8	1.4	0	4.2
REC	0	0	4.9	0	0	4.9	4.9	4.9	0	4.9	4.9	0	0	0	4.8	1.4	0	4.2
F.F.	0	0	0	0	1.0	0	4.9	4.9	0	4.9	4.9	0	0	0	4.8	4.9	0	4.8
REW	0	0	0	0	0.9	0	4.9	4.9	0	4.9	4.9	0	0	0	4.8	4.9	0	4.8
REF. NO.	QR6005			QR6006			QR6007			QR6008			QR6009			QR6010		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP 2	5.0	1.4	4.9	5.0	−0.1	5.0	5.0	0.1	4.7	5.0	0.3	5.0	0	0.1	4.2	0	0.3	5.0
PLAY	5.0	1.4	4.9	5.0	0	5.0	5.0	0.3	4.7	5.0	0.3	5.0	0	0.1	4.2	0	0.3	4.7
REC	5.0	1.4	4.9	5.0	0	5.0	5.0	0.3	4.7	5.0	0.3	5.0	0	0.1	4.2	0	0.3	4.7
F.F.	5.0	4.9	0	5.0	0	5.0	5.0	0.6	4.4	5.0	0.3	5.0	0	0.1	4.8	0	0.3	4.4
REW	5.0	4.9	0	5.0	0	5.0	5.0	0.6	4.4	5.0	0.3	5.0	0	0.1	4.8	0	0.5	4.4
REF. NO.	QR6011			QR6012			QR6014			QR6101			QR6102			QR6103		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP 2	0	3.5	0	0	3.4	0.4	5.0	4.4	4.9	0	0.2	4.1	0	3.4	0	0	3.4	0
PLAY	0	3.5	0	0	3.7	0.4	5.0	4.4	4.9	0	0.2	4.1	0	3.4	0	0	3.4	0
REC	0	3.5	0	0	3.4	0.4	5.0	4.4	4.9	0	0.3	4.1	0	3.4	0	0	3.4	0
F.F.	0	3.5	0	0	3.4	0.4	5.0	4.4	4.9	0	0	4.2	0	3.3	0	0	3.3	0
REW	0	3.5	0	0	3.4	0.4	5.0	4.4	4.9	0	0.3	4.2	0	3.3	0	0	3.3	0
REF. NO.	QR6104																	
MODE	E	C	B															
STOP 2	0	4.6	0															
PLAY	5.0	4.4	0															
REC	5.0	4.5	0															
F.F.	4.9	4.4	0															
REW	4.9	4.3	0															

4-2. SYSTEM CONTROL & SERVO SECTION IN MAIN SCHEMATIC DIAGRA

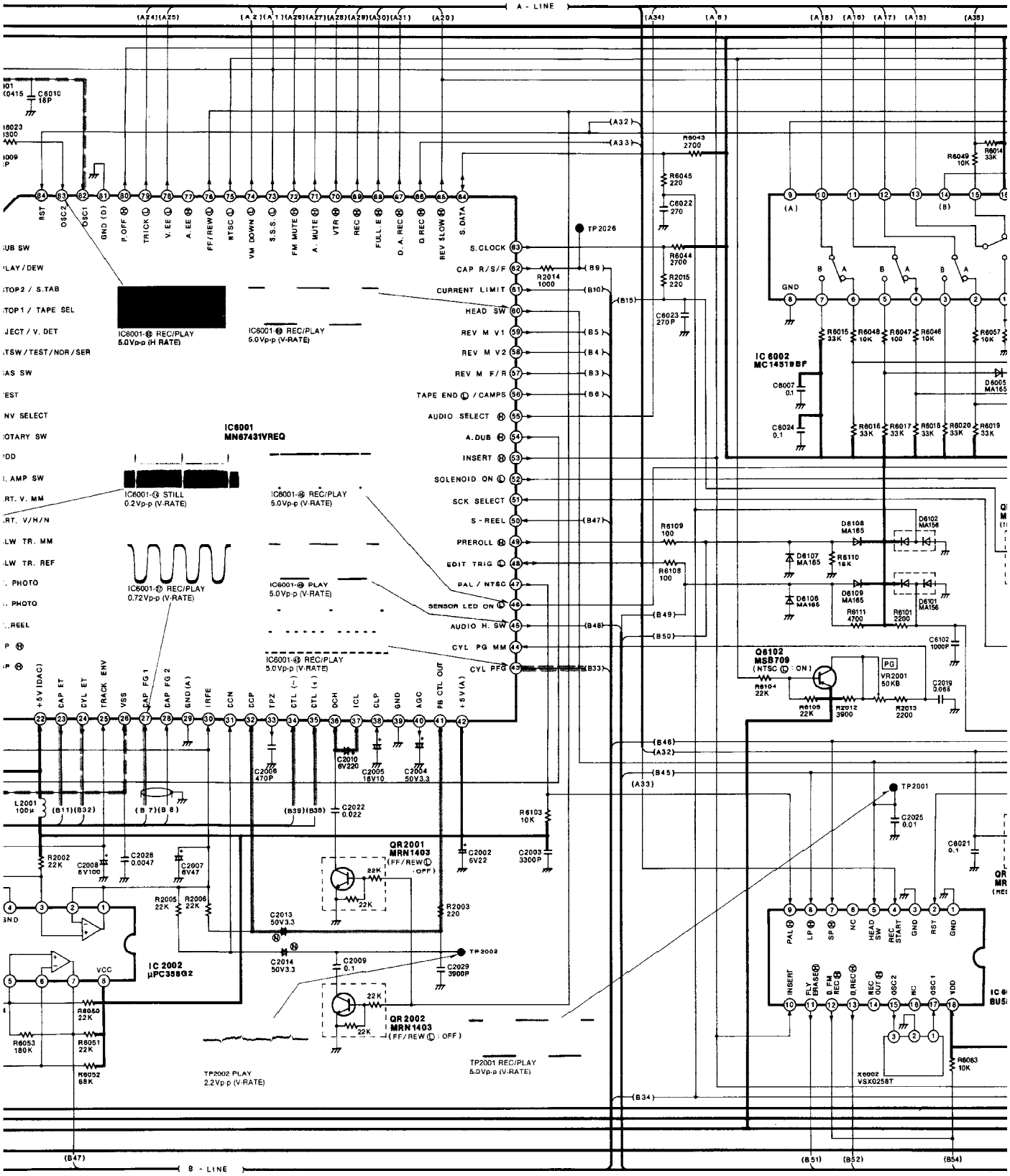


AGRAM

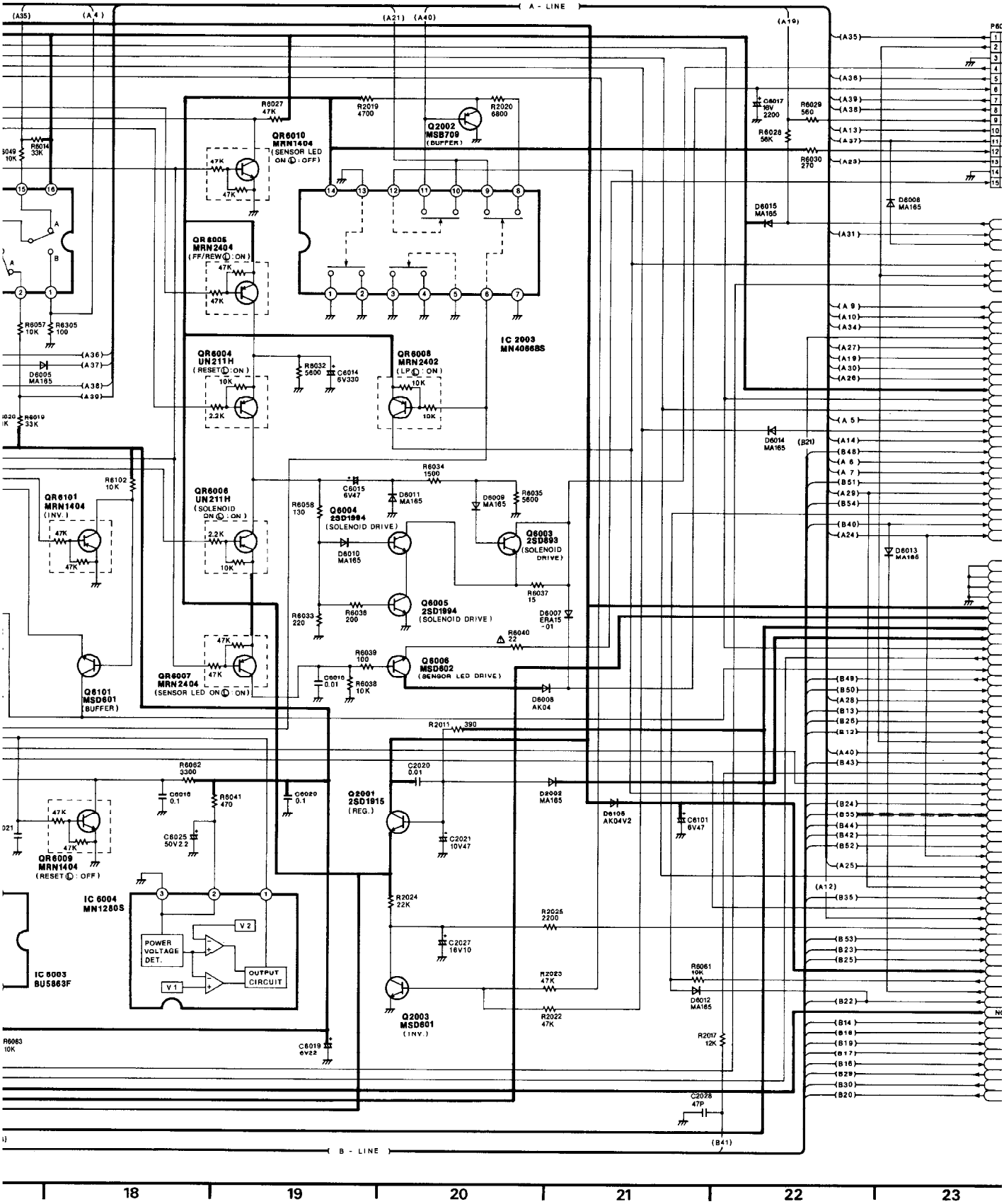


6 | 7 | 8 | 9 | 10 | 11

RVO PHASE LOOP — — — CYLINDER SERVO SPEED LOOP — — — CYLINDER SERVO PH



O PHASE LOOP


A - LINE
B - LINE
QR6010 MRN1404 (SENSOR LED ON Ⓓ : OFF)
Q2002 MSB709 (BUFFER)
QR6005 MRN2404 (FF/REW Ⓓ : ON)
IC 2003 MN40668S
QR6004 UN211H (RESET Ⓓ : ON)
QR6008 MRN2402 (LP Ⓓ : ON)
QR6006 UN211H (SOLENOID ON Ⓓ : ON)
QR6101 MRN1404 (INV.)
Q6004 2SD1994 (SOLENOID DRIVE)
Q6003 2SD893 (SOLENOID DRIVE)
Q6005 2SD1994 (SOLENOID DRIVE)
Q6006 MSD602 (SENSOR LED DRIVE)
QR6007 MRN2404 (SENSOR LED ON Ⓓ : ON)
Q6101 MSD601 (BUFFER)
Q2001 2SD1915 (REG.)
QR6009 MRN1404 (RESET Ⓓ : OFF)
IC 6004 MN1280S
POWER VOLTAGE DET.
OUTPUT CIRCUIT
V2
V1
IC 6003 BU5863F
Q2003 MSD601 (INV.)
D6105 AK04V2
D6008 AK04
D6008 MA165
D6015 MA165
D6014 MA165
D6013 MA165
D6012 MA165
D6005 MA165
D6010 MA165
D6011 MA165
D6009 MA165
D2002 MA165
D6007 ERA15-01
C6101 6V47
C6019 6V22
C2028 47P
R2017 12K
R6061 10K
R2022 47K
R2023 47K
R2025 2200
R2024 22K
C2027 16V10
C2021 10V47
C2020 0.01
R2011 390
R6040 22
R6039 100
R6038 10K
C6016 0.01
R6033 220
R6037 15
R6035 5600
R6034 1500
C6015 6V47
R6058 130
R6102 10K
R6032 5600
C6014 6V330
R6057 10K
R6305 100
R6014 33K
R6019 33K
R6027 47K
R2019 4700
R2020 6800
C6017 16V 2200
R6029 560
R6028 56K
R6030 270
R6062 3300
C6018 0.1
R6041 470
C6020 0.1
C6025 50V2.2
R6063 10K
(A35)
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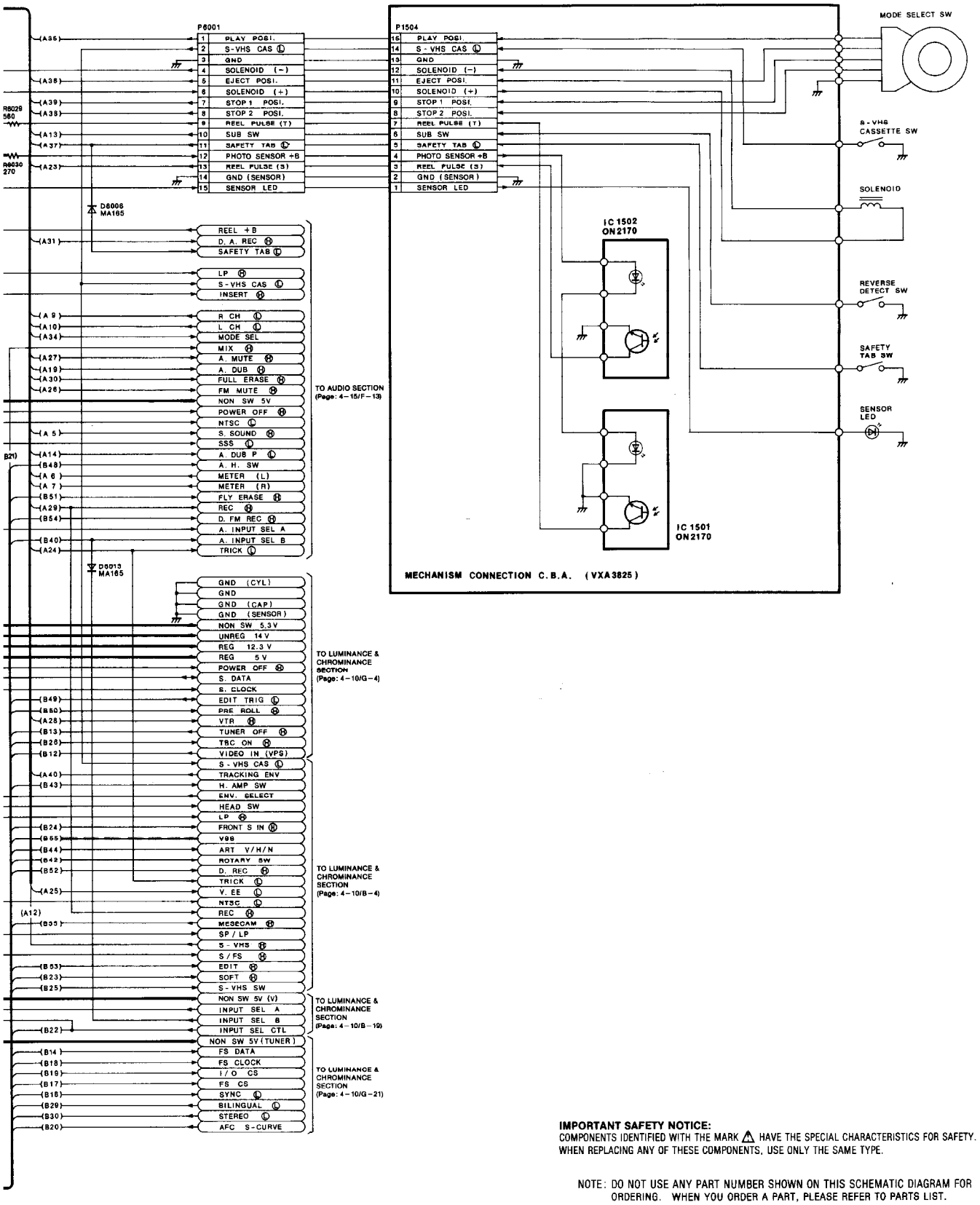
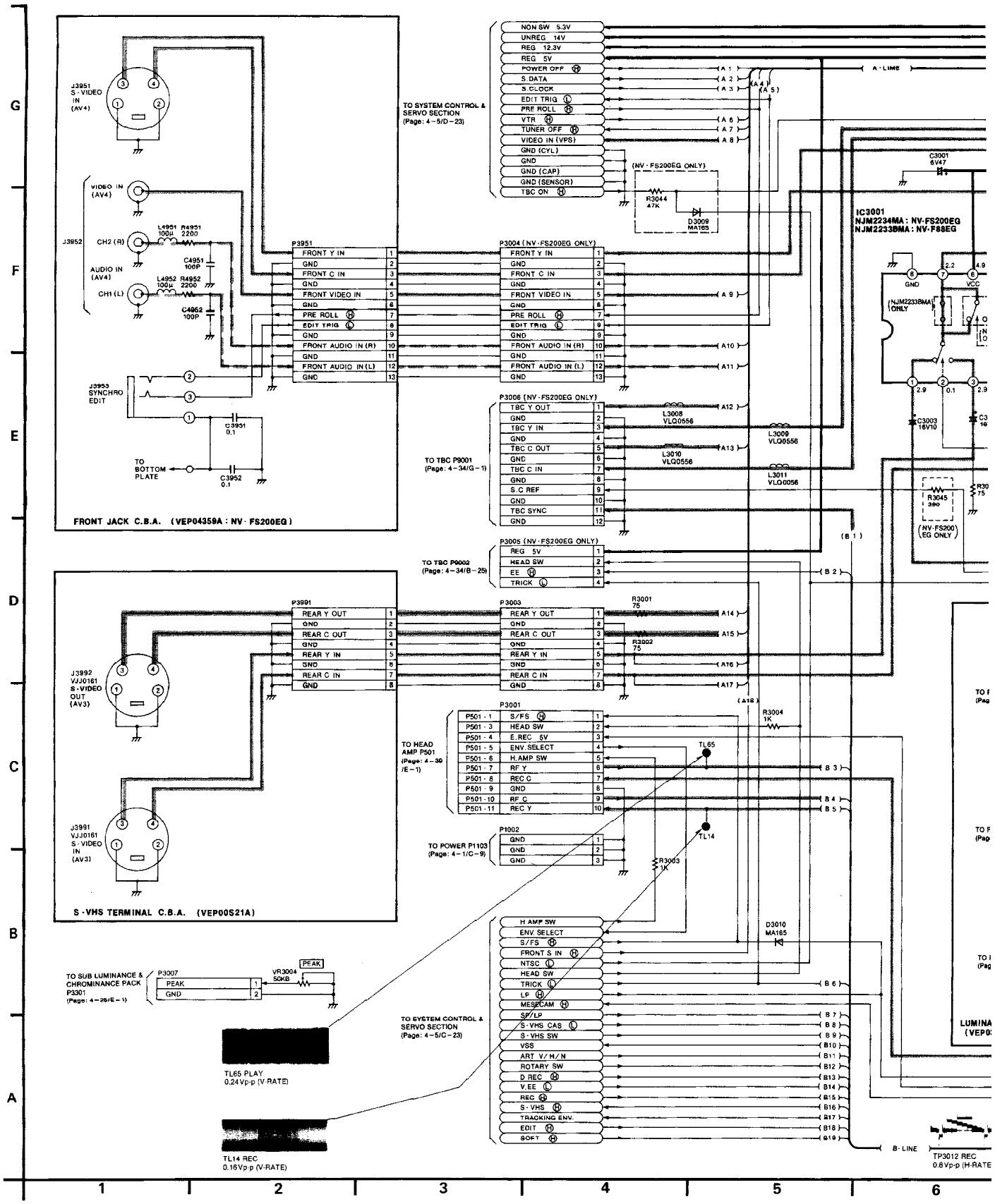
(B41)



IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

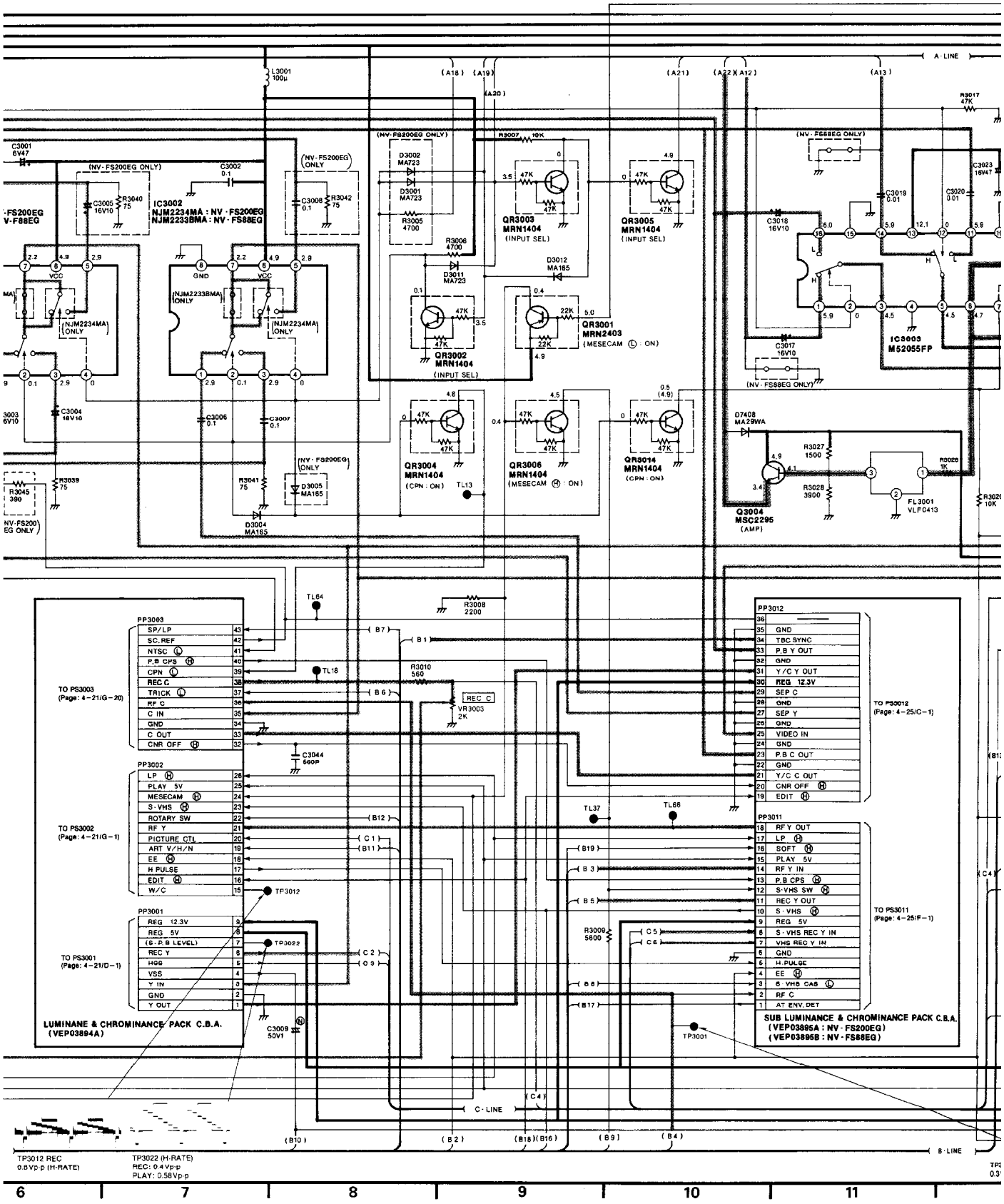
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-3. LUMINANCE & CHROMINANCE SECTION IN MAIN SCHEMATIC DIAG


FRONT JACK C.B.A. (VEP04359A : NV-FS200EG)
S-VHS TERMINAL C.B.A. (VEP00S21A)
TO SYSTEM CONTROL & SERVO SECTION (Page: 4-5/D-23)
TO TBC P9001 (Page: 4-34/G-1)
TO TBC P9002 (Page: 4-34/B-25)
TO HEAD AMP P501 (Page: 4-30/E-1)
TO POWER P1103 (Page: 4-1/C-9)
TO SUB LUMINANCE & CHROMINANCE PACK P3301 (Page: 4-26/E-1)
TO SYSTEM CONTROL & SERVO SECTION (Page: 4-5/C-23)
IC3001
NJM2234MA : NV-FS200EG
NJM2233BMA : NV-F88EG
TL65 PLAY
0.24Vp-p (V-RATE)
TL14 REC
0.16Vp-p (V-RATE)
TP3012 REC
0.8Vp-p (H-RATE)

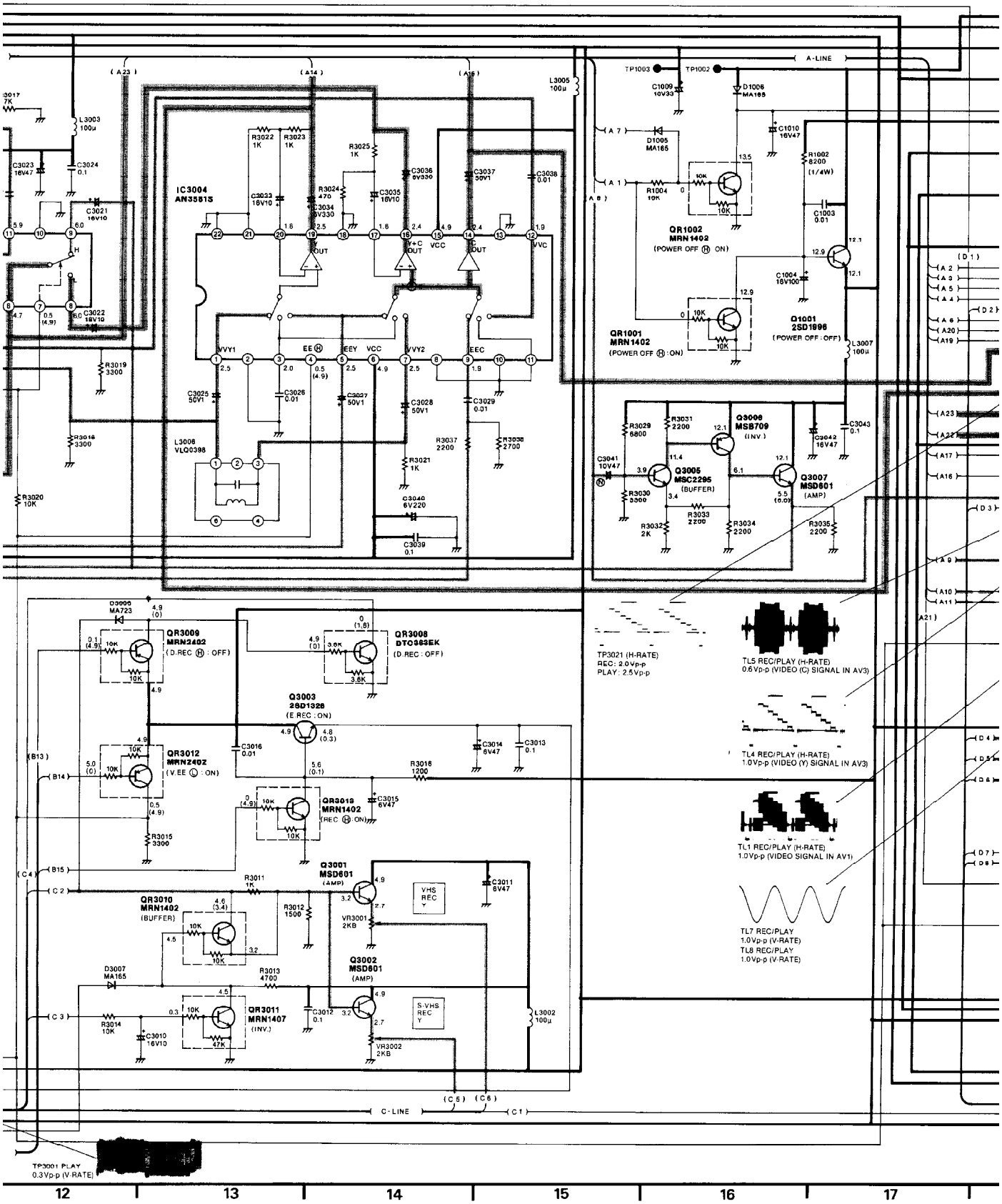
DIAGRAM

VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MO

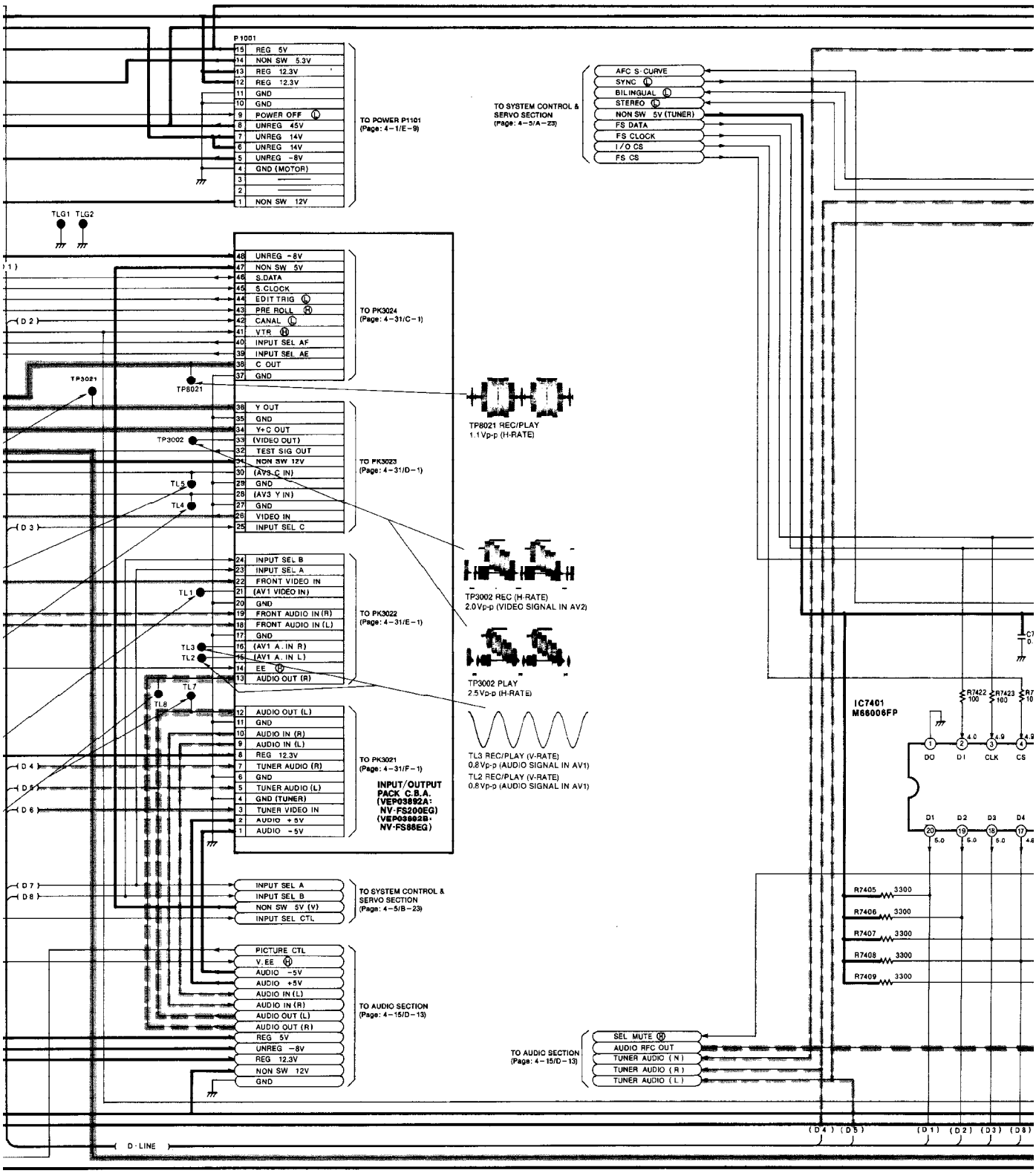


MODE

AUDIO MAIN SIGNAL PATH IN REC MODE
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE



12 13 14 15 16 17



NO

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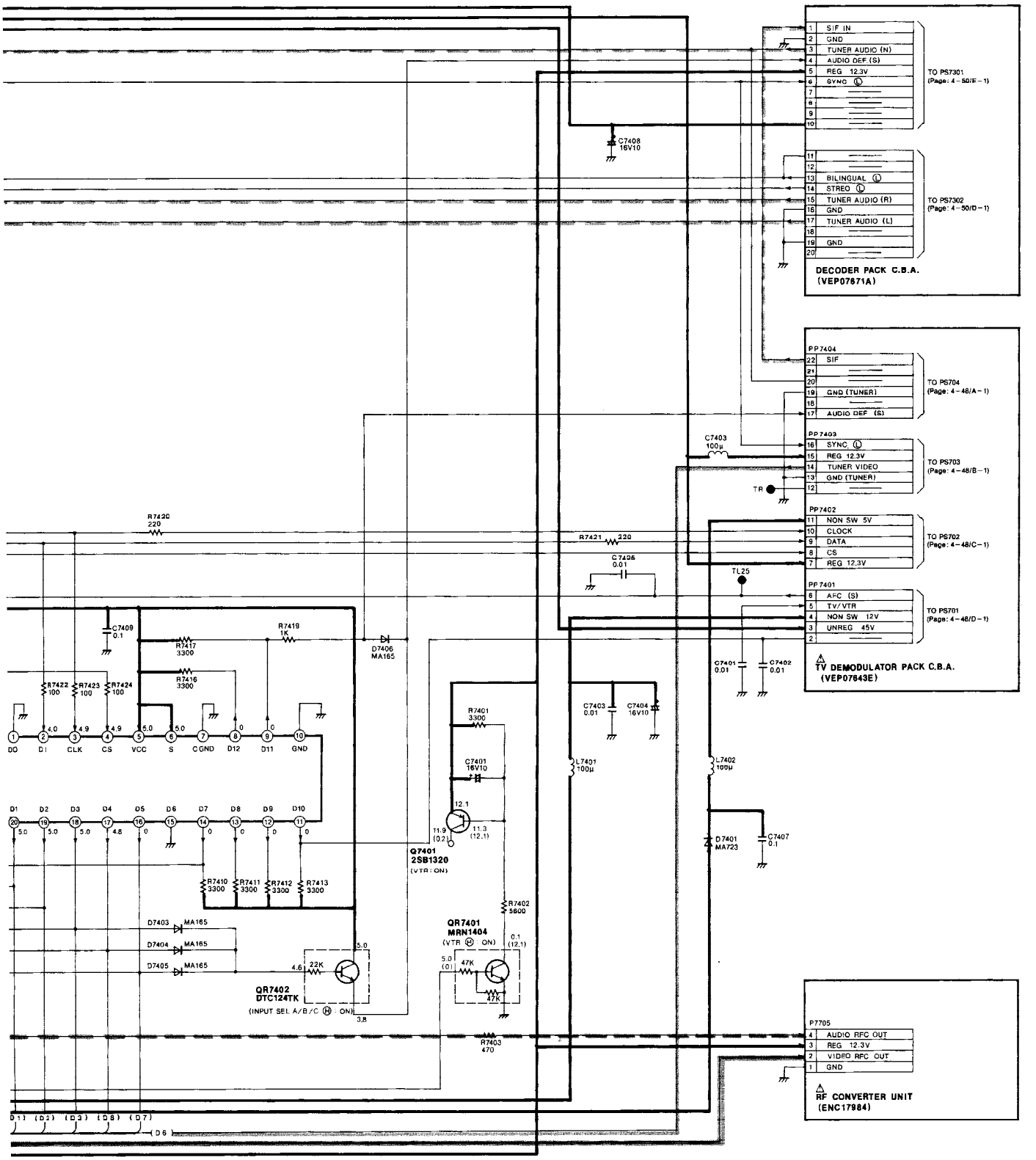
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.



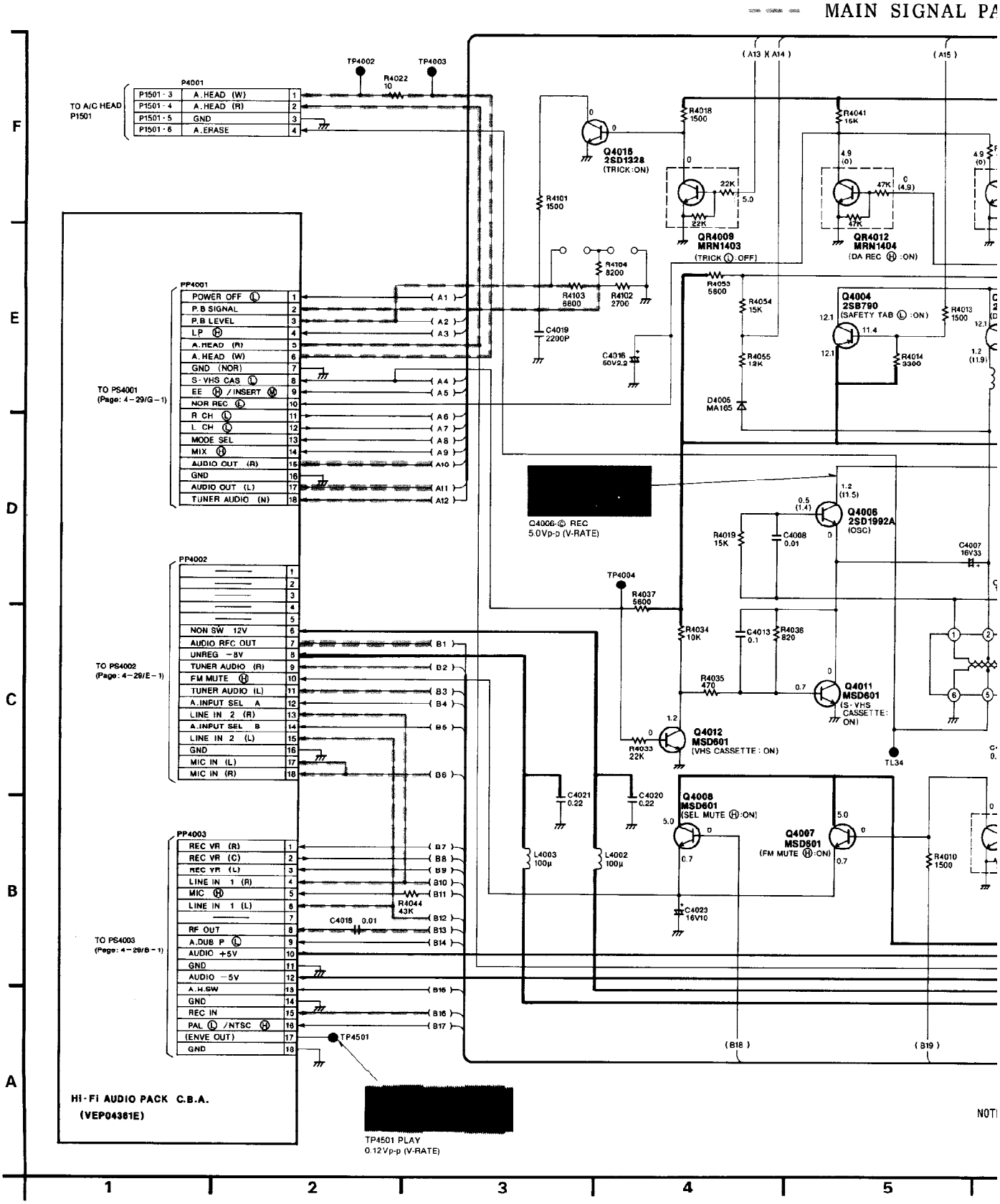
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

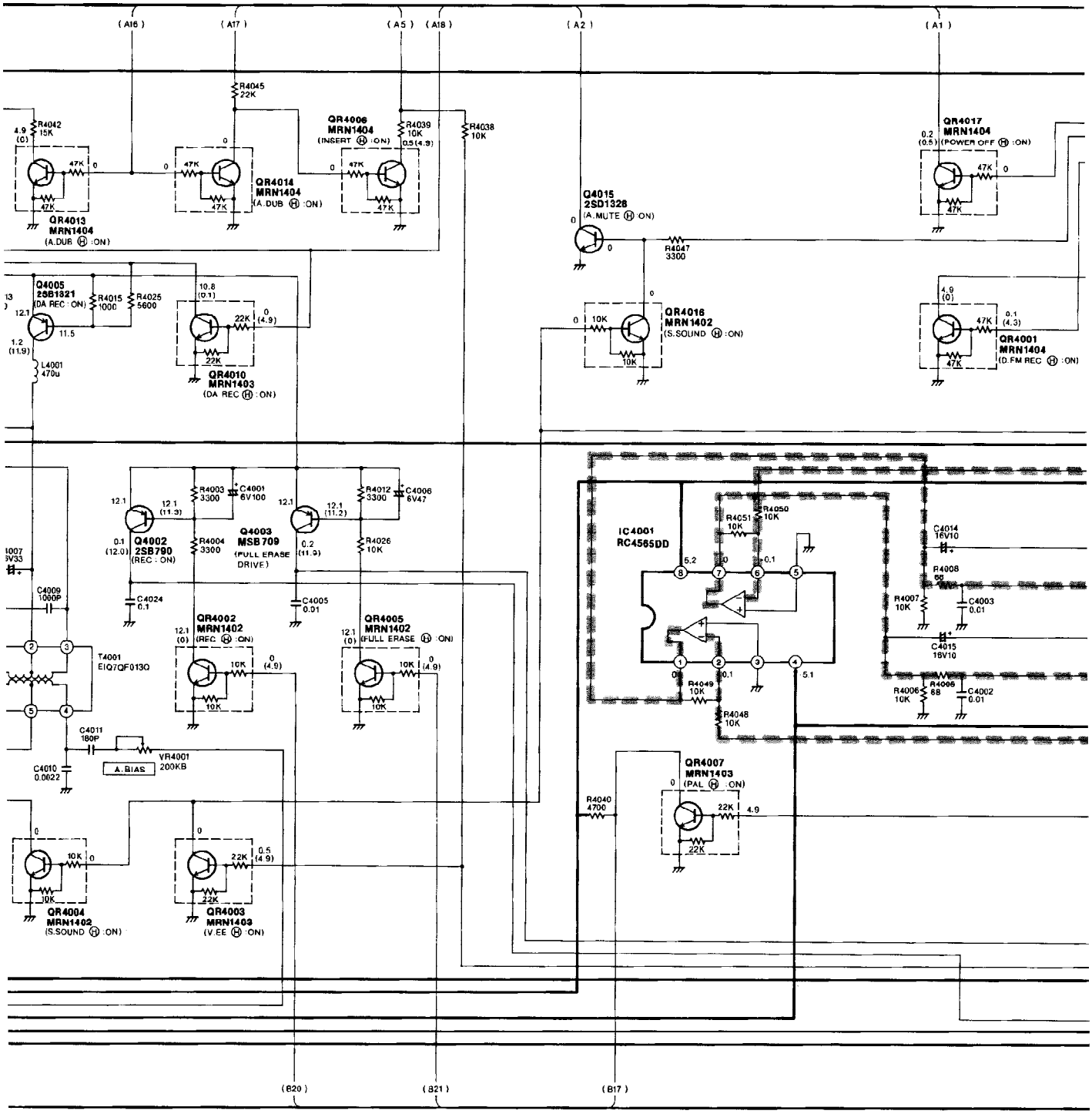
SAFETY.

23 24 25 26 27 28

4-4. AUDIO SECTION IN MAIN SCHEMATIC DIAGRAM

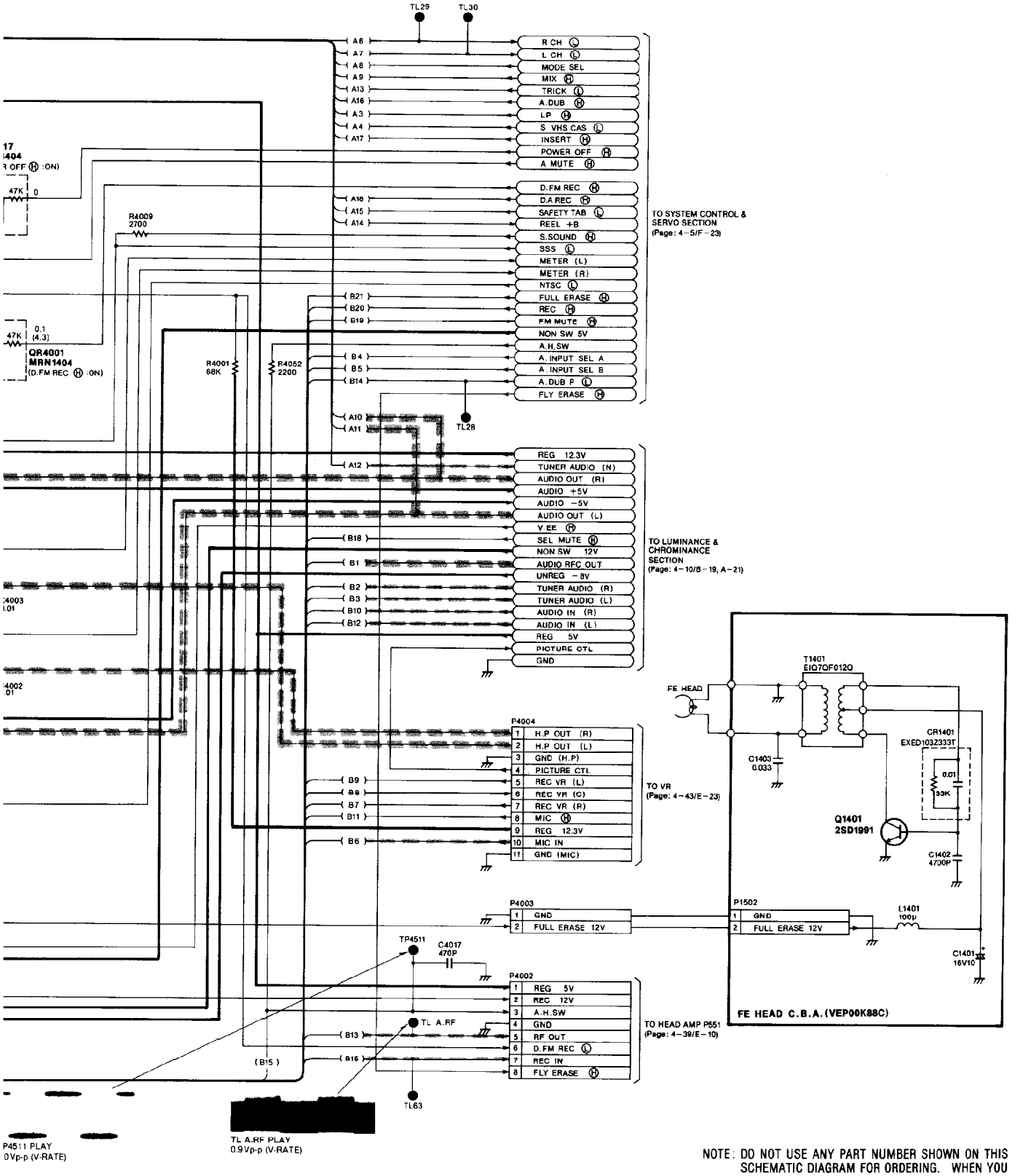


PATH IN REC MODE — — — MAIN SIGNAL PATH IN PLAYBACK MODE



NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE
WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE) • LINE IN SIGNAL LEVEL... −10dB 1kHz
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE
WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

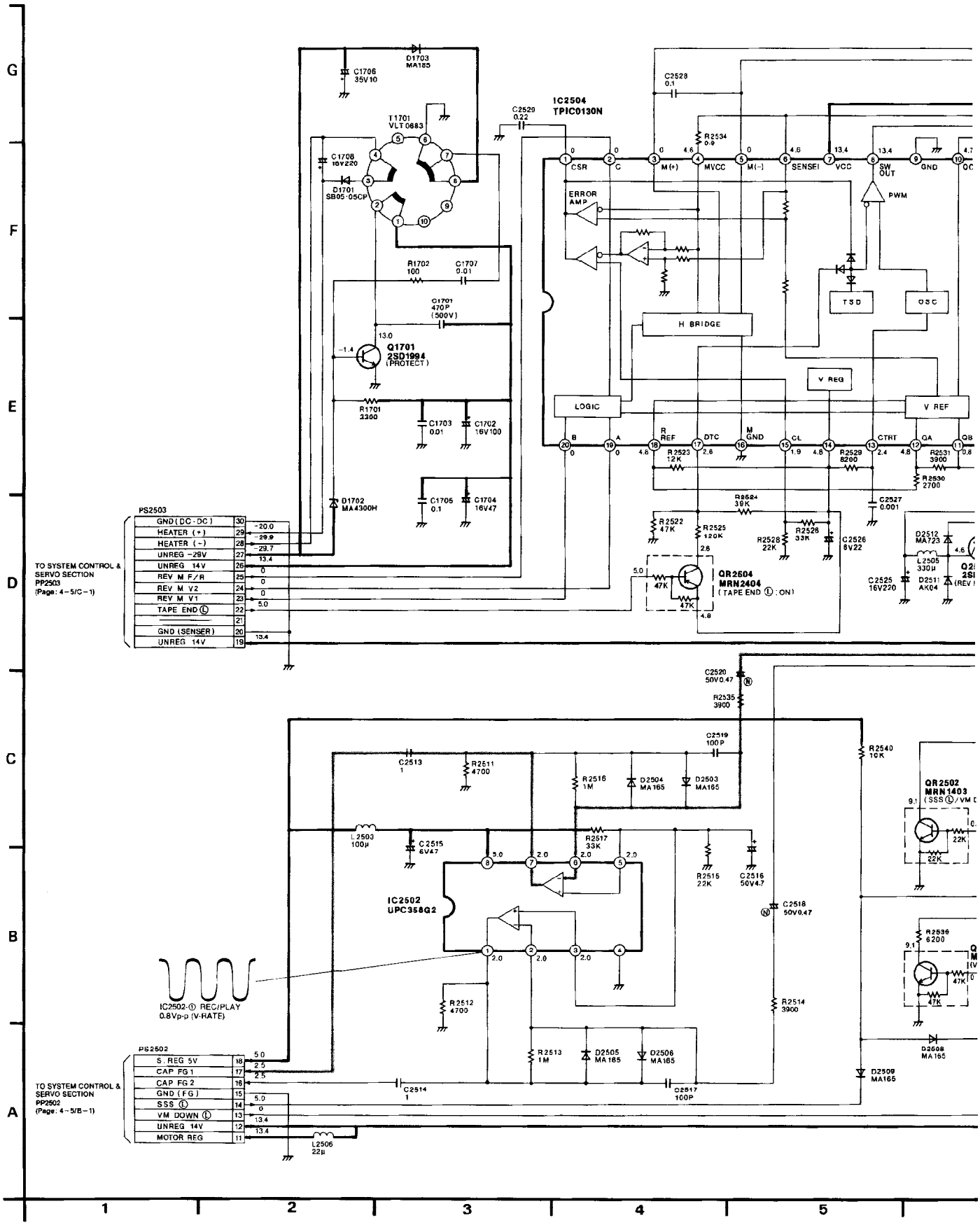
TP4511 PLAY
5.0Vp-p (V-RATE)



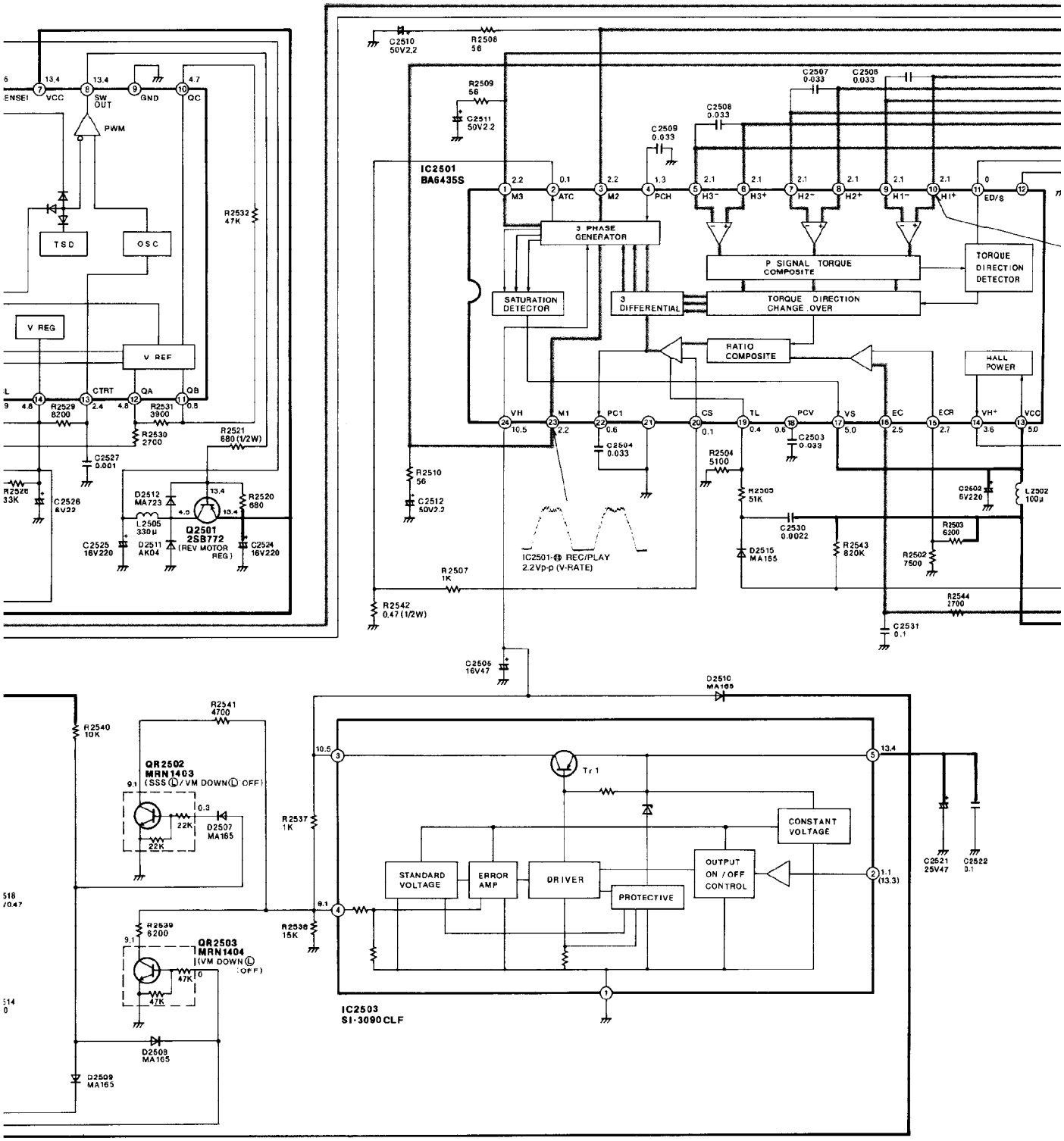
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

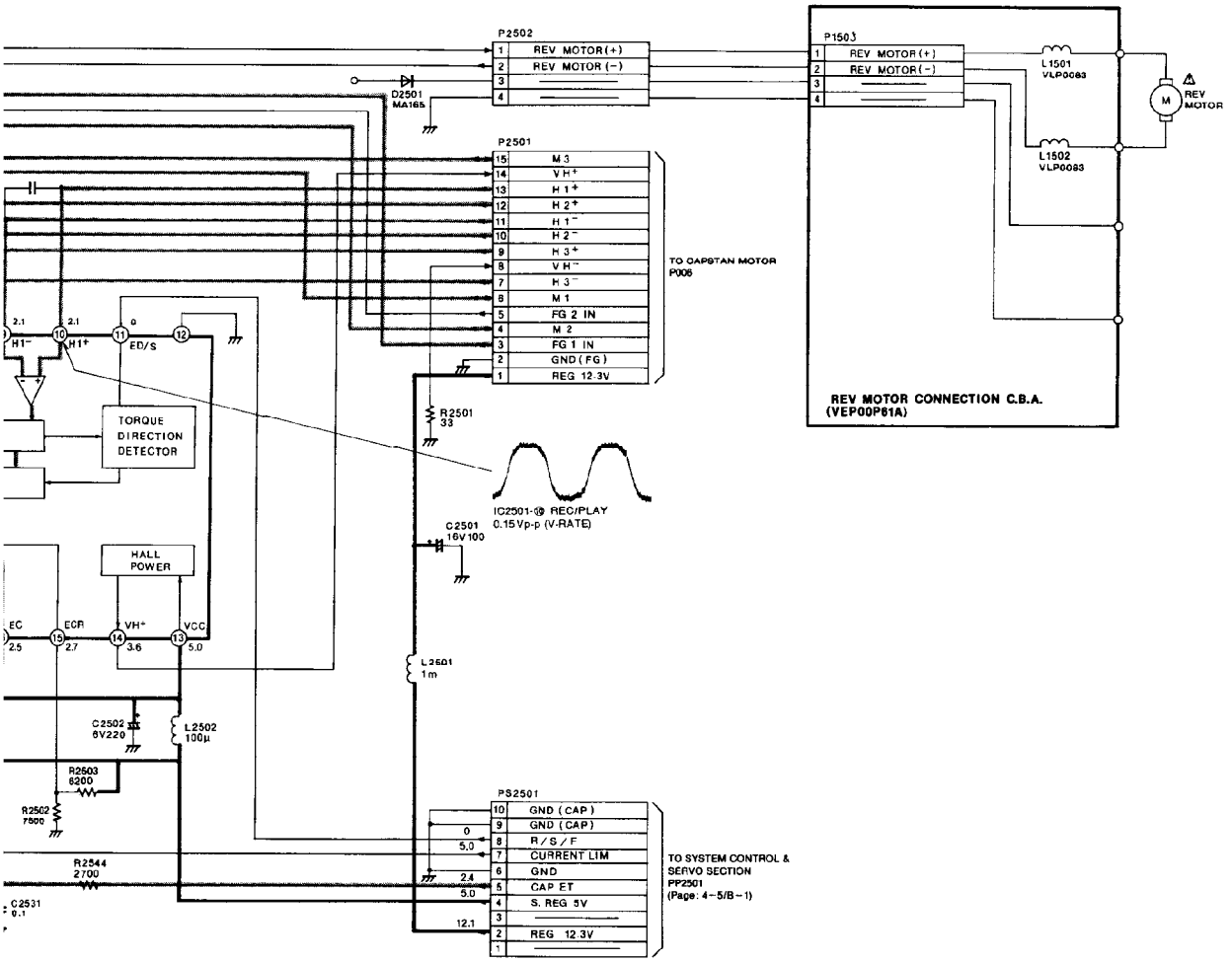
4-5. SERVO PACK SCHEMATIC DIAGRAM

CAPSTAN SERVO SPEE



TAN SERVO SPEED LOOP





NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

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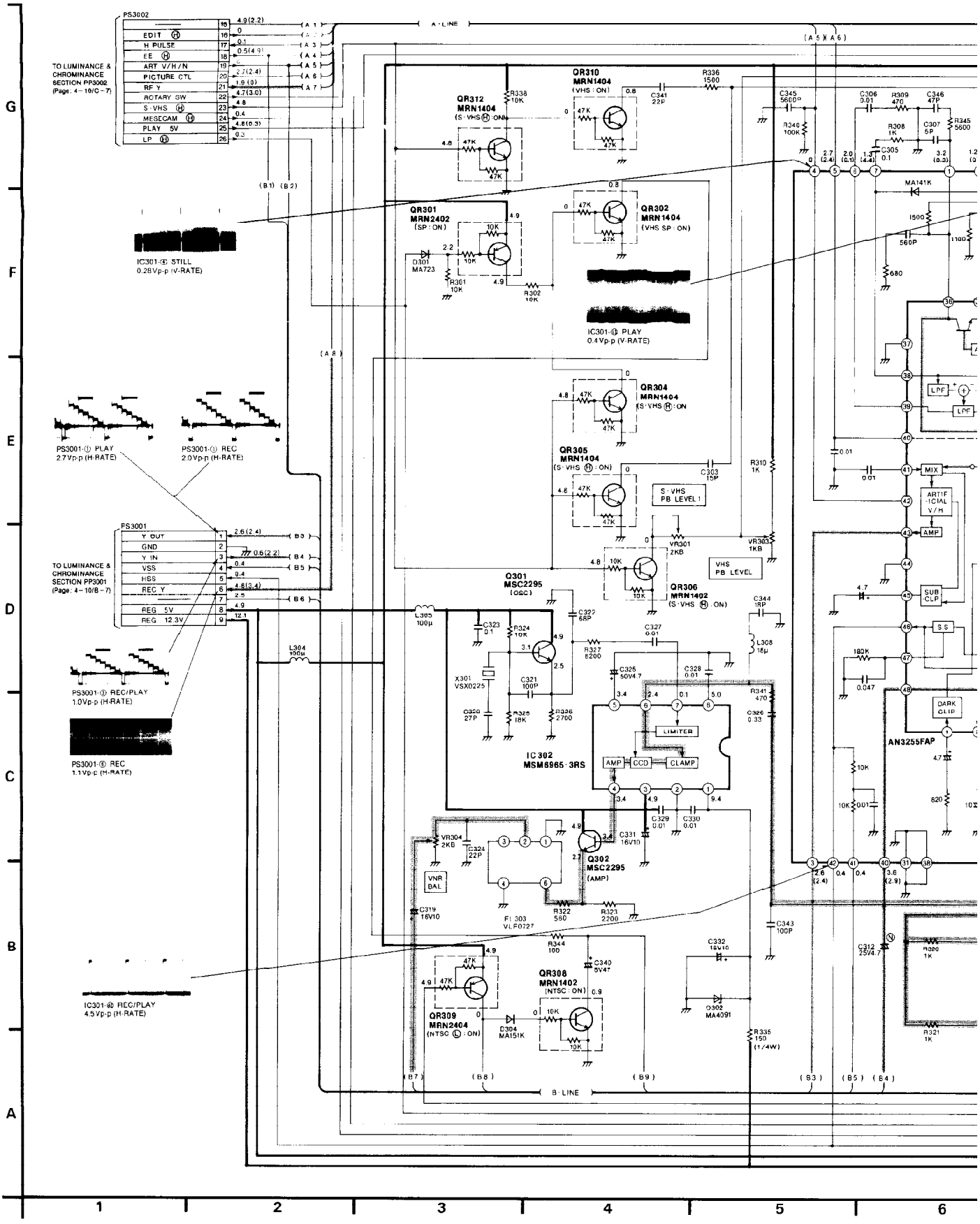
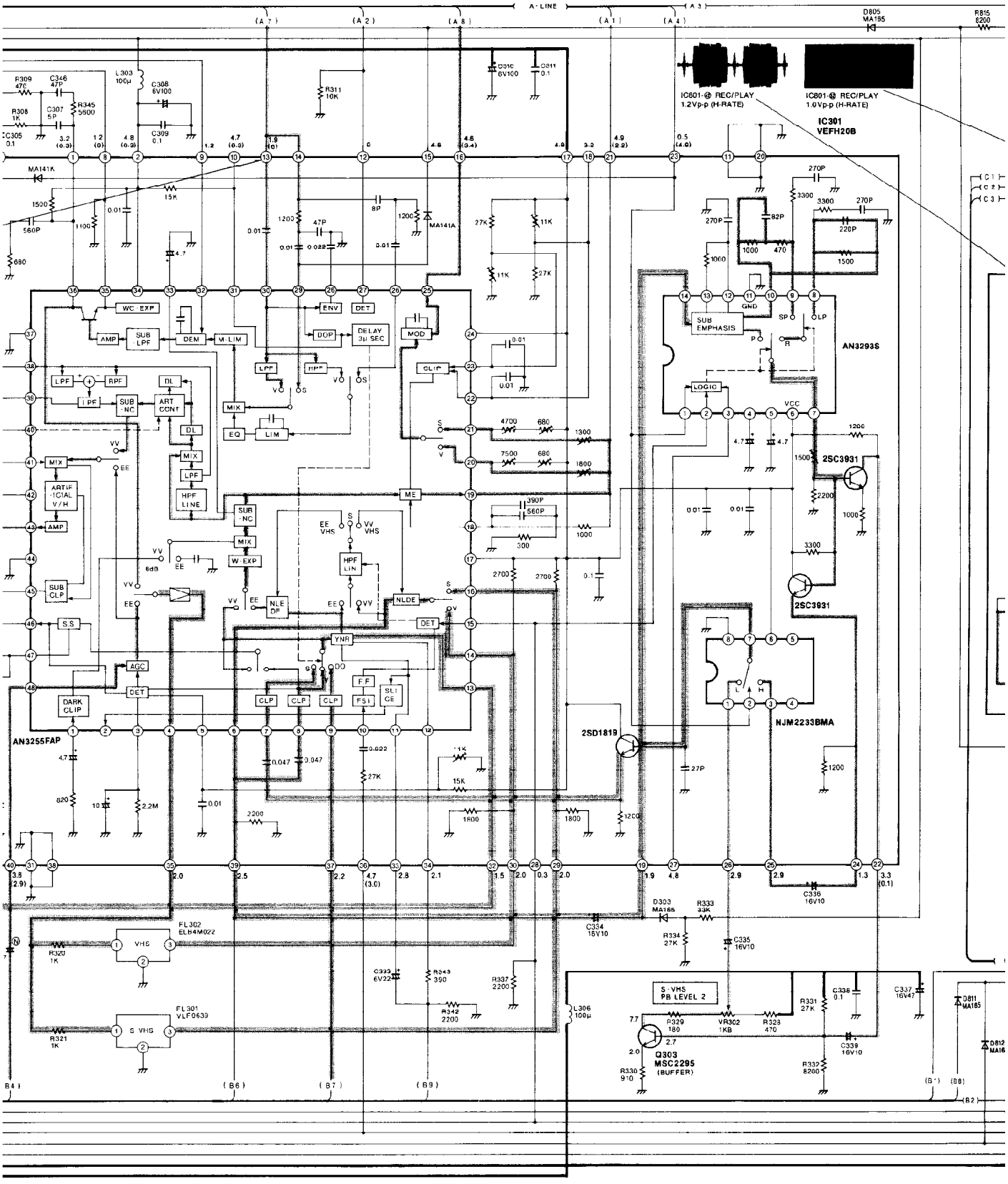
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

4-6. LUMINANCE & CHROMINANCE PACK SCHEMATIC DIAGRAM



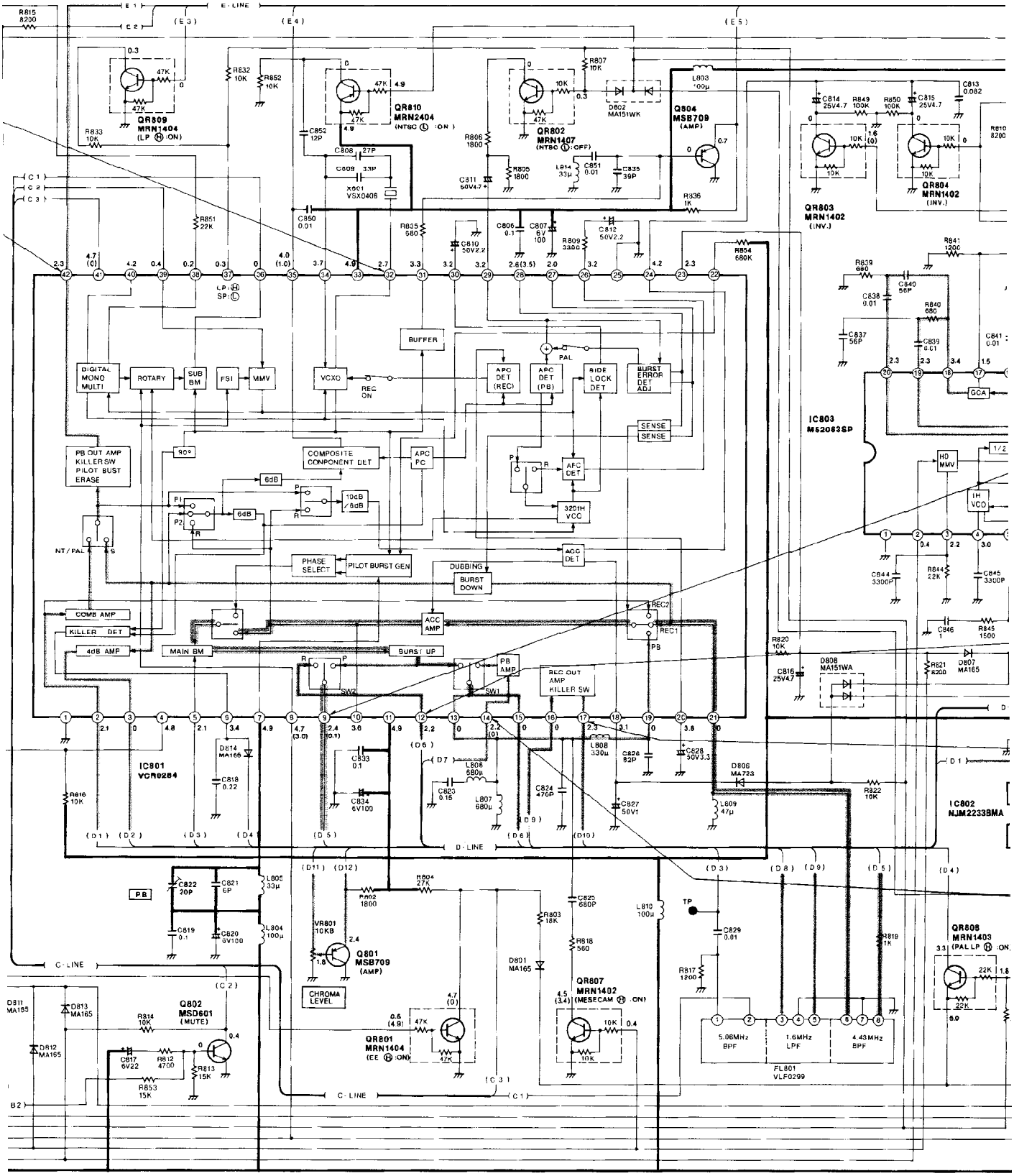
MAIN SIGNAL PATH IN REC MODE

MAIN SIGNAL PA



6 | 7 | 8 | 9 | 10 | 11

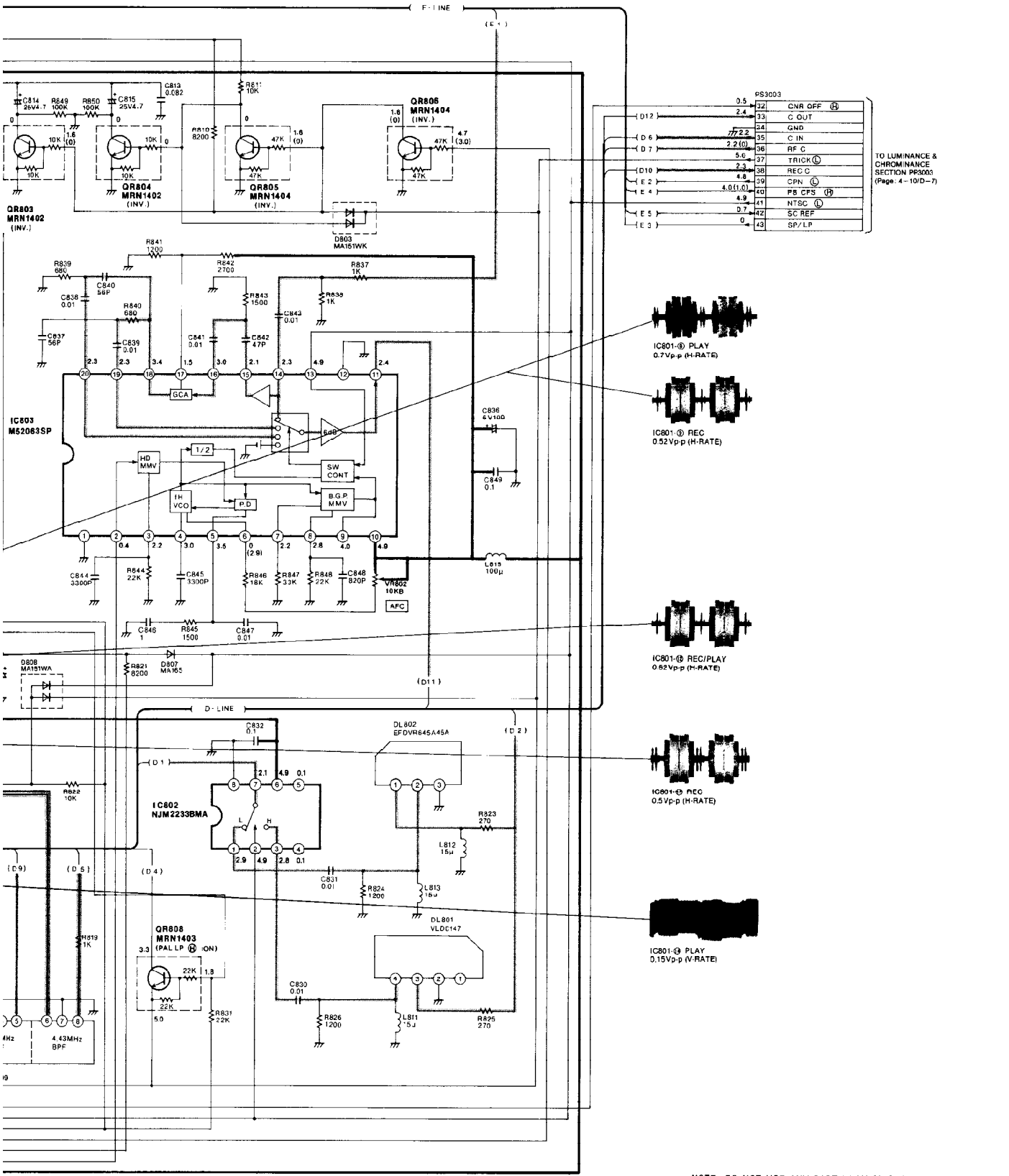
L PATH IN PLAYBACK MODE



NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

THE MEASUREMENT MODE OF WITH PAL COLOUR SIGNAL. (

12 13 14 15 16 17

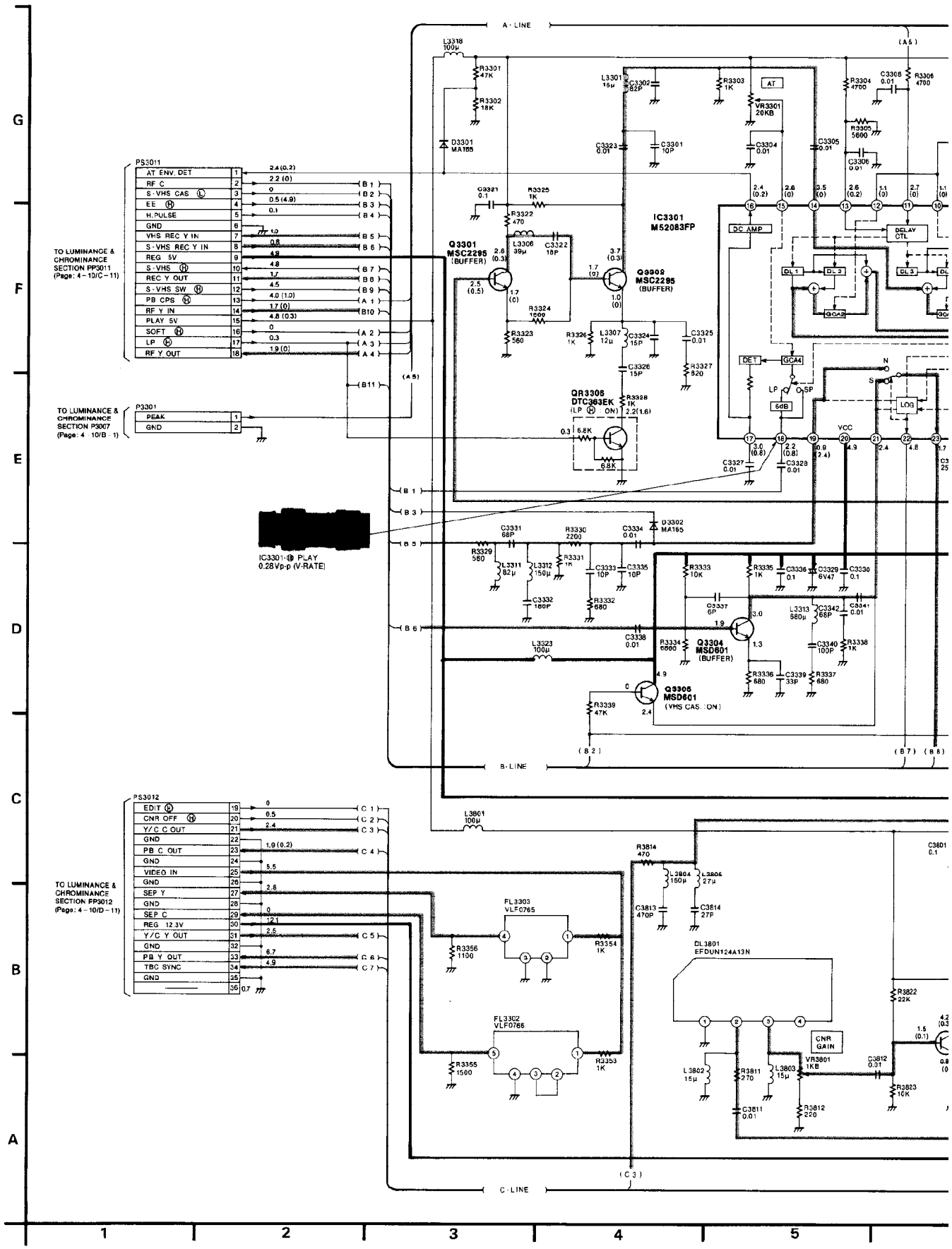


ECORD MODE THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

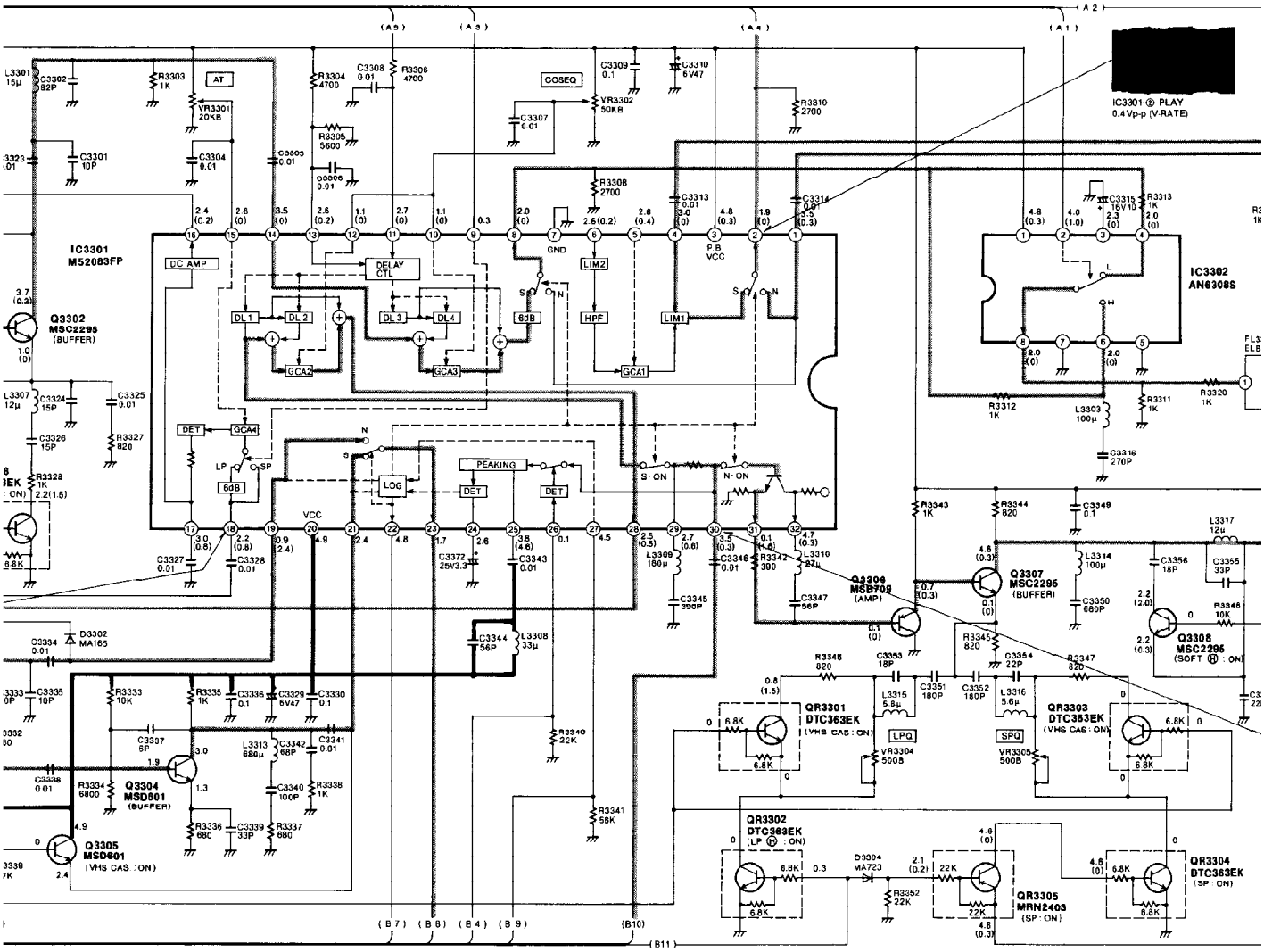
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

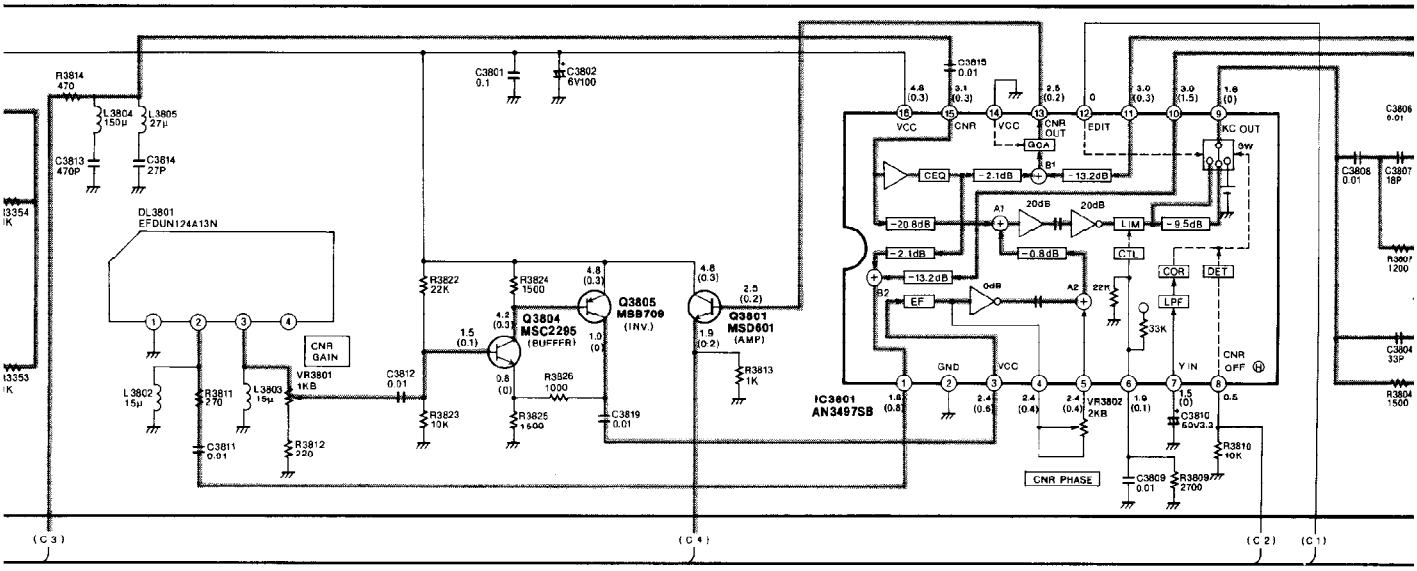
16 | 17 | 18 | 19 | 20 | 21

4-7. SUB LUMINANCE & CHROMINANCE PACK SCHEMATIC DIAGRAM

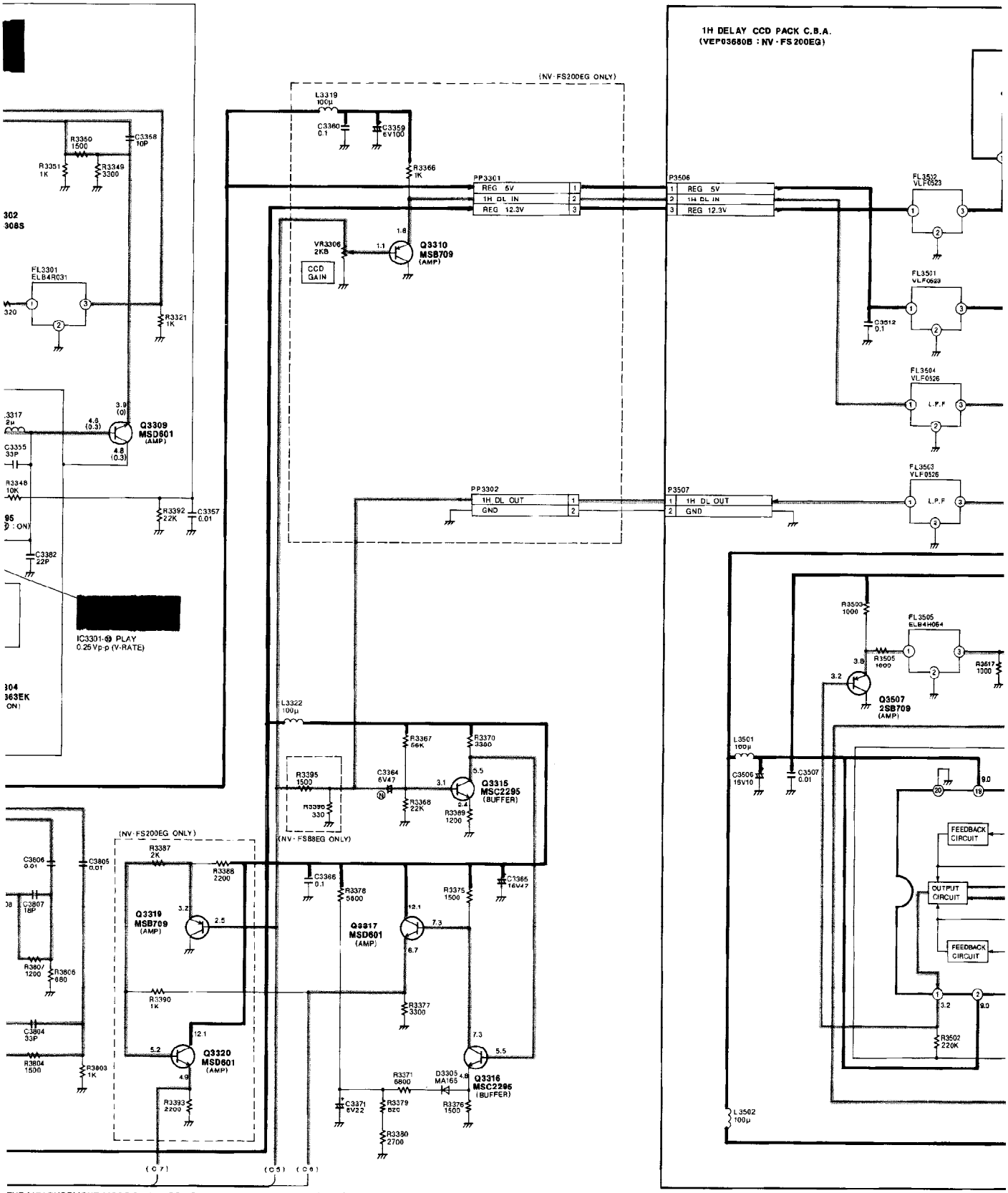


CK SCHEMATIC DIAGRAM





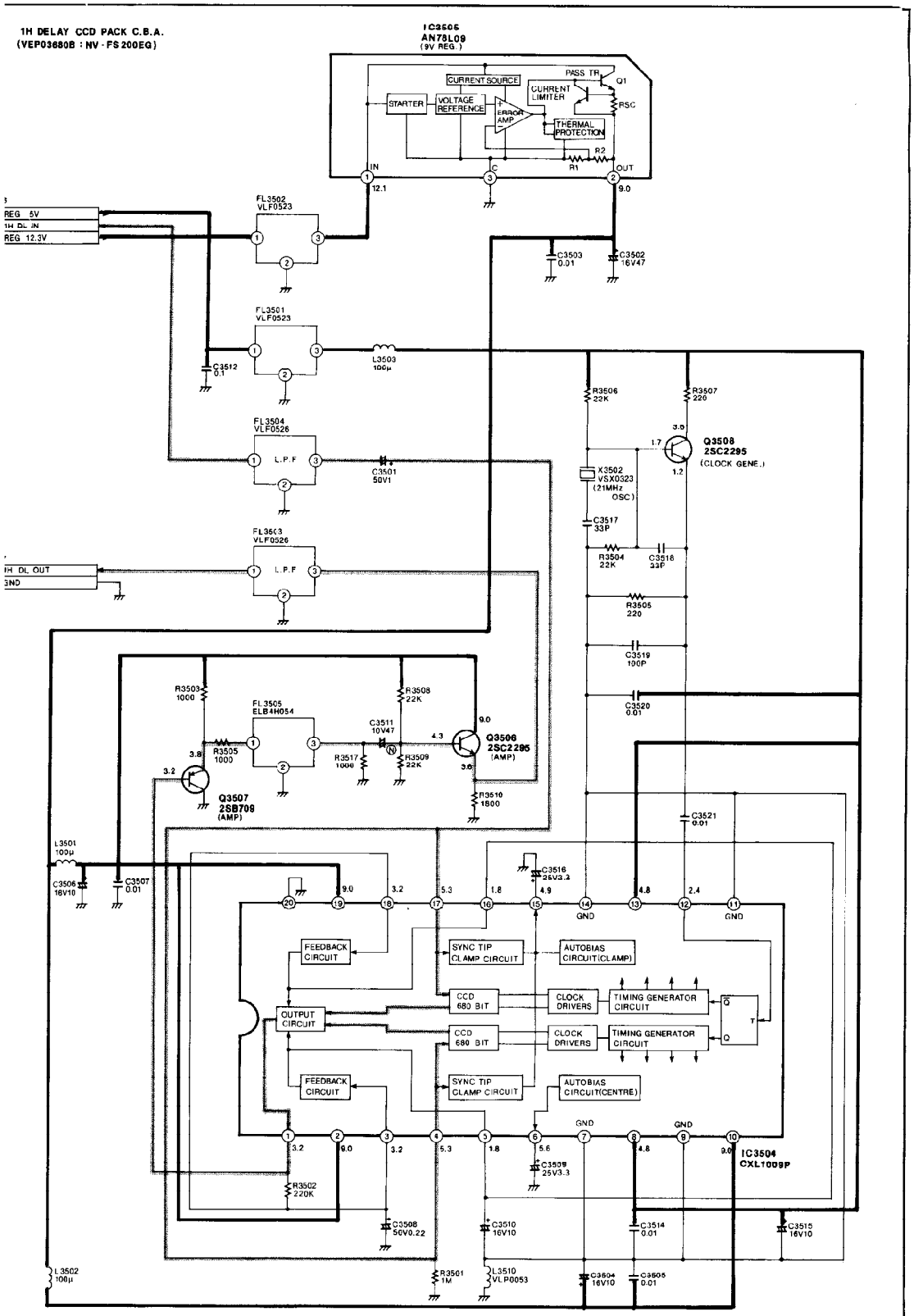
NOTE: THE MEA
WITH PA



THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK M WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

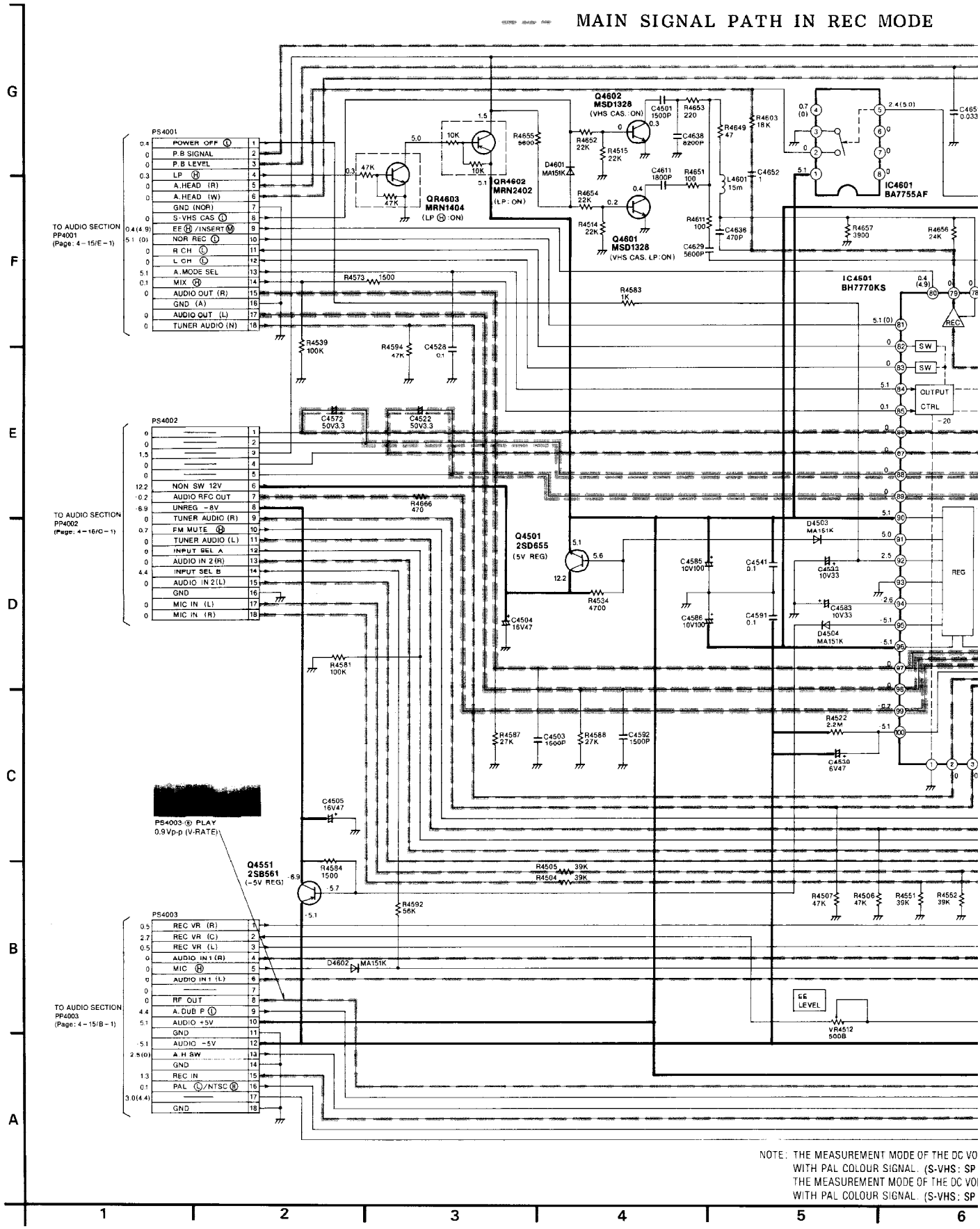
:EC MODE — MAIN SIGNAL PATH IN PLAYBACK MODE



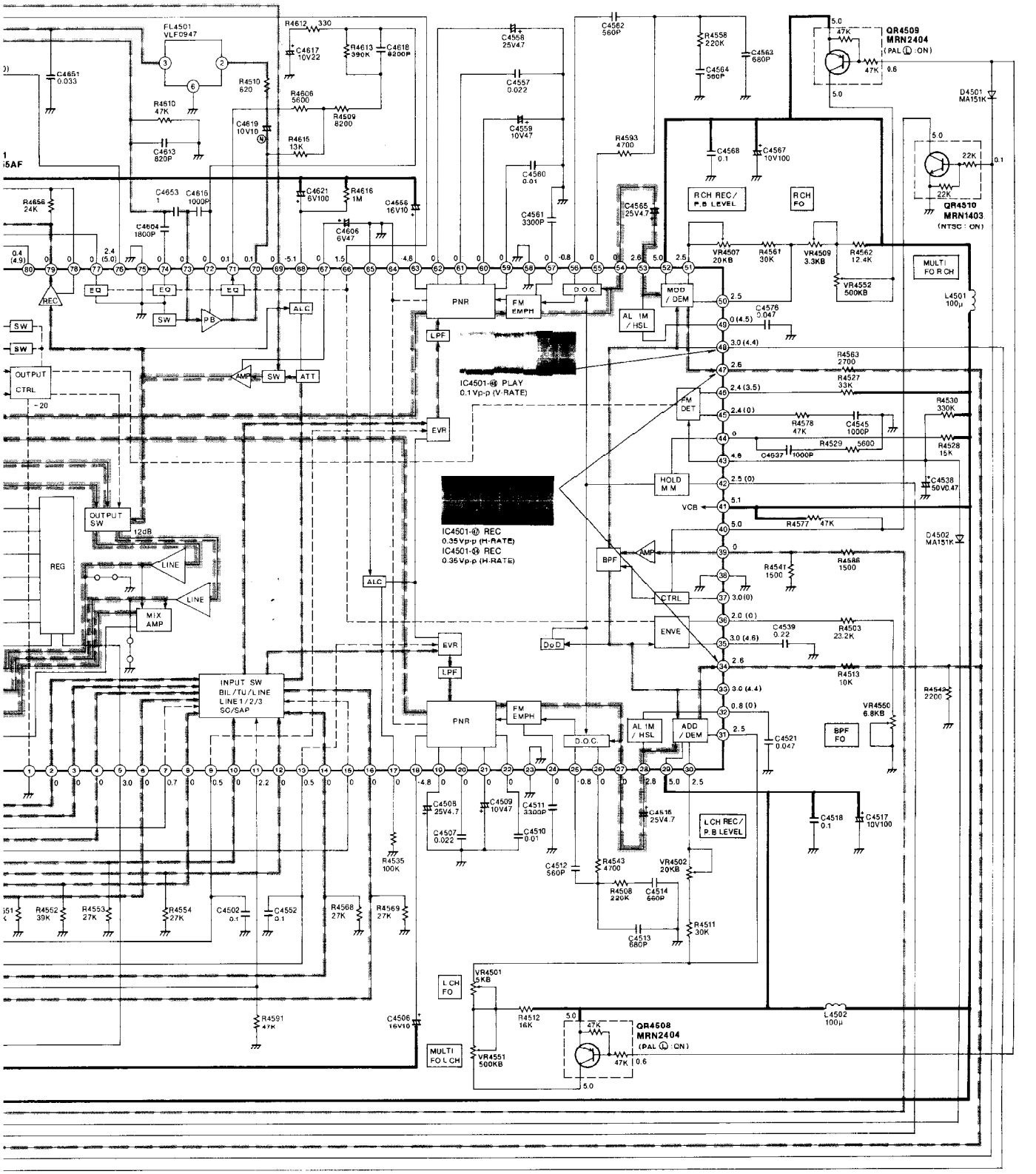
: DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE
HS : SP MODE)

NOTE : DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-8. Hi-Fi AUDIO PACK SCHEMATIC DIAGRAM



DE — MAIN SIGNAL PATH IN PLAYBACK MODE



DE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE
AL. (S-VHS : SP MODE)
DE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE
AL. (S-VHS : SP MODE)

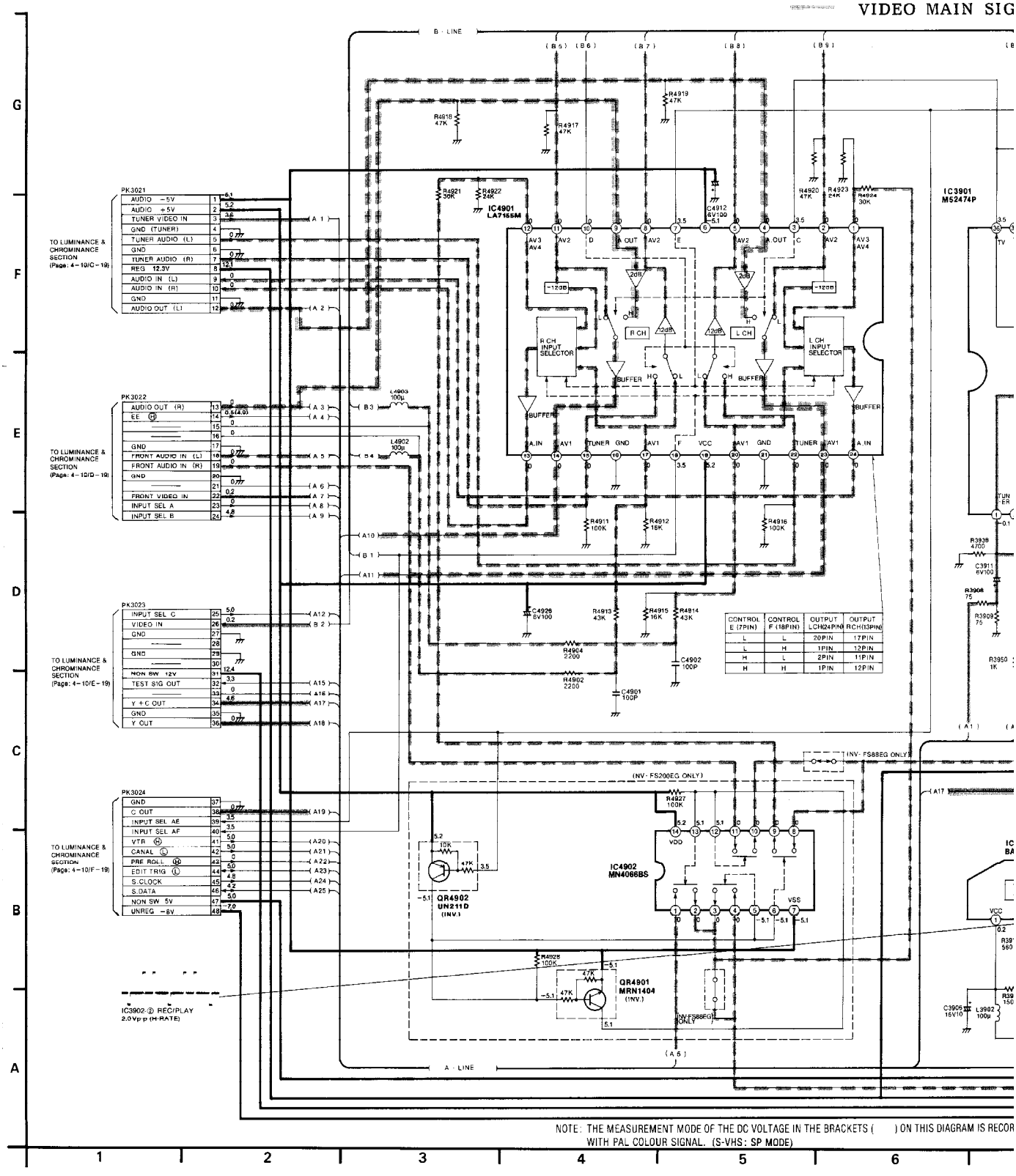
• LINE IN SIGNAL LEVEL... -10dB 1kHz

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-9. INPUT/OUTPUT PACK SCHEMATIC DIAGRAM

VIDEO MAIN SIG

VIDEO MAIN SIG


B - LINE
A - LINE
PK3021
PK3022
PK3023
PK3024
IC4901 LA7165M
IC3901 M52474P
IC4902 MN4066BS
QR4902 UN211D (INV.)
QR4901 MRN1404 (INV.)
L4903 100μ
L4902 100μ
TO LUMINANCE & CHROMINANCE SECTION (Page: 4-10/C-19)
TO LUMINANCE & CHROMINANCE SECTION (Page: 4-10/D-19)
TO LUMINANCE & CHROMINANCE SECTION (Page: 4-10/E-19)
TO LUMINANCE & CHROMINANCE SECTION (Page: 4-10/F-19)
IC3902 ② REC/PLAY 2.0Vp-p (H-RATE)
(INV-FS200EG ONLY)
(INV-FS88EG ONLY)
R CH INPUT SELECTOR
L CH INPUT SELECTOR
BUFFER
CONTROL E (7PIN) | CONTROL F (18PIN) | OUTPUT LCH(24PIN) | OUTPUT RCH(13PIN)
L | L | 20PIN | 17PIN
L | H | 1PIN | 12PIN
H | L | 2PIN | 11PIN
H | H | 1PIN | 12PIN

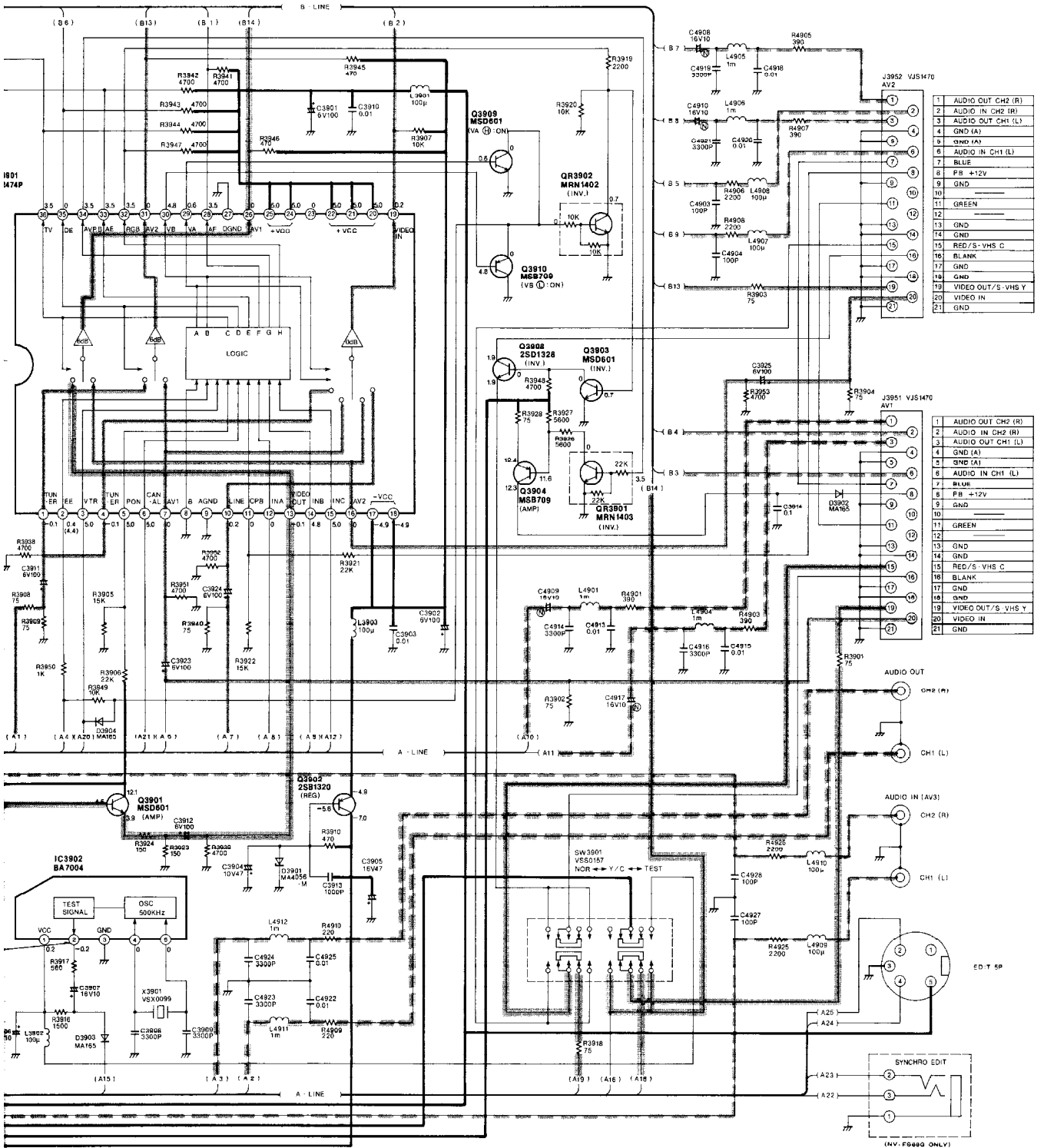
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECOR
WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

IN SIGNAL PATH IN REC MODE

IN SIGNAL PATH IN PLAYBACK MODE

AUDIO MAIN SIGNAL PATH IN REC MODE

AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE



1	AUDIO OUT CH2 (R)
2	AUDIO IN CH2 (R)
3	AUDIO OUT CH1 (L)
4	GND (A)
5	GND (A)
6	AUDIO IN CH1 (L)
7	BLUE
8	P/B +12V
9	GND
10	
11	GREEN
12	
13	GND
14	GND
15	RED/S-VHS C
16	BLANK
17	GND
18	GND
19	VIDEO OUT/S-VHS Y
20	VIDEO IN
21	GND

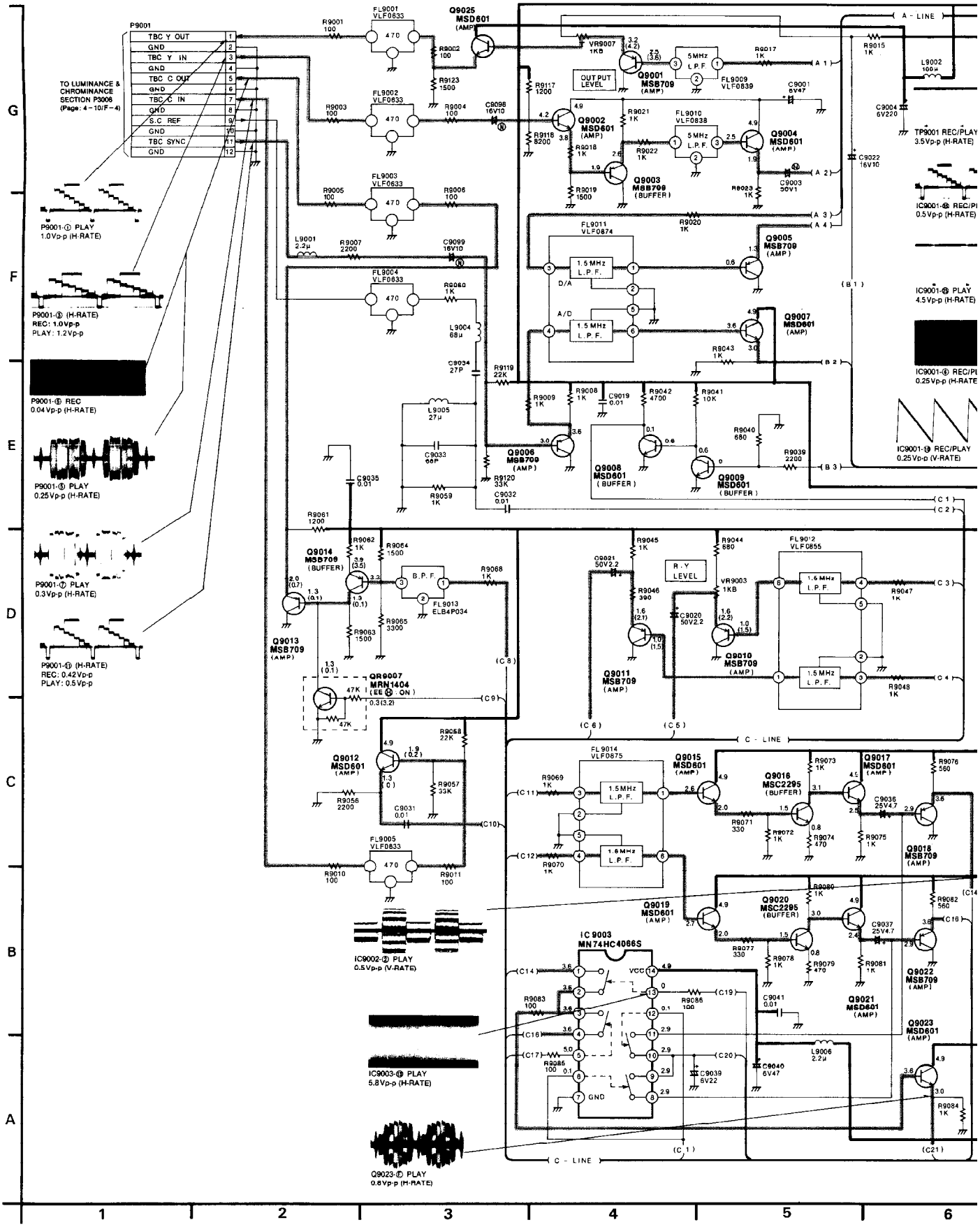
RAM IS RECORD MODE

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

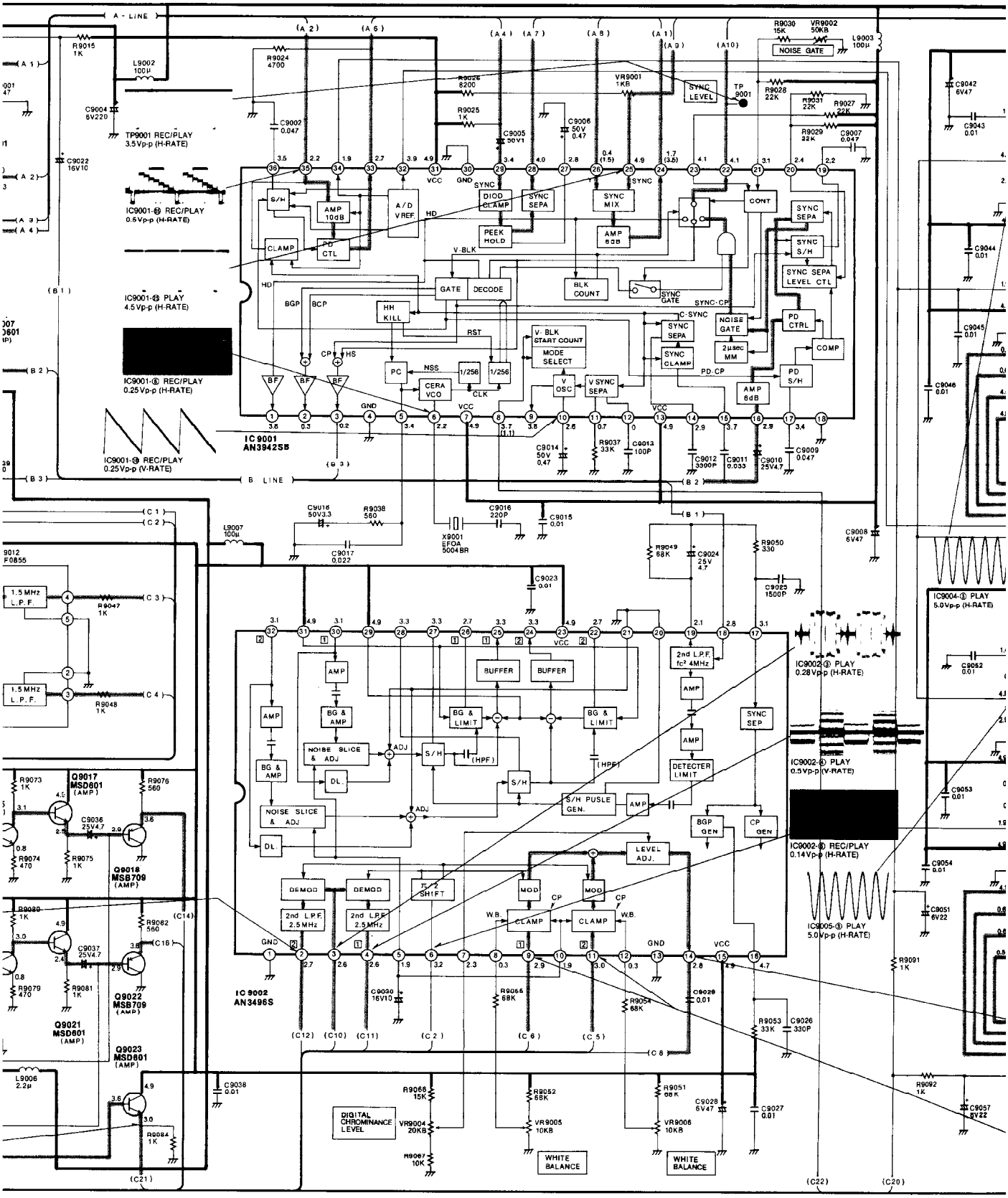
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

7 8 9 10 11 12

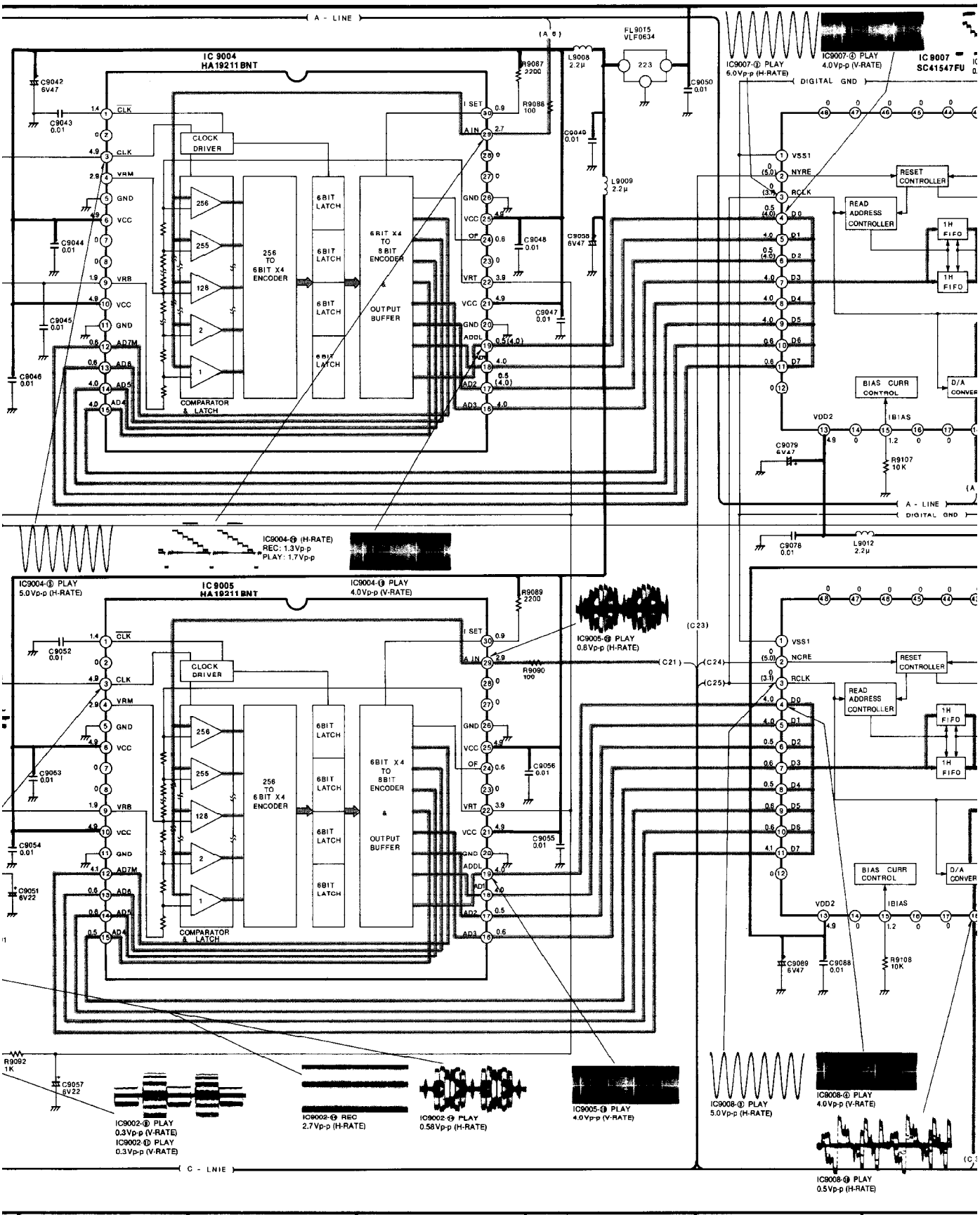
4-10. TBC SCHEMATIC DIAGRAM (NV-FS200EG)

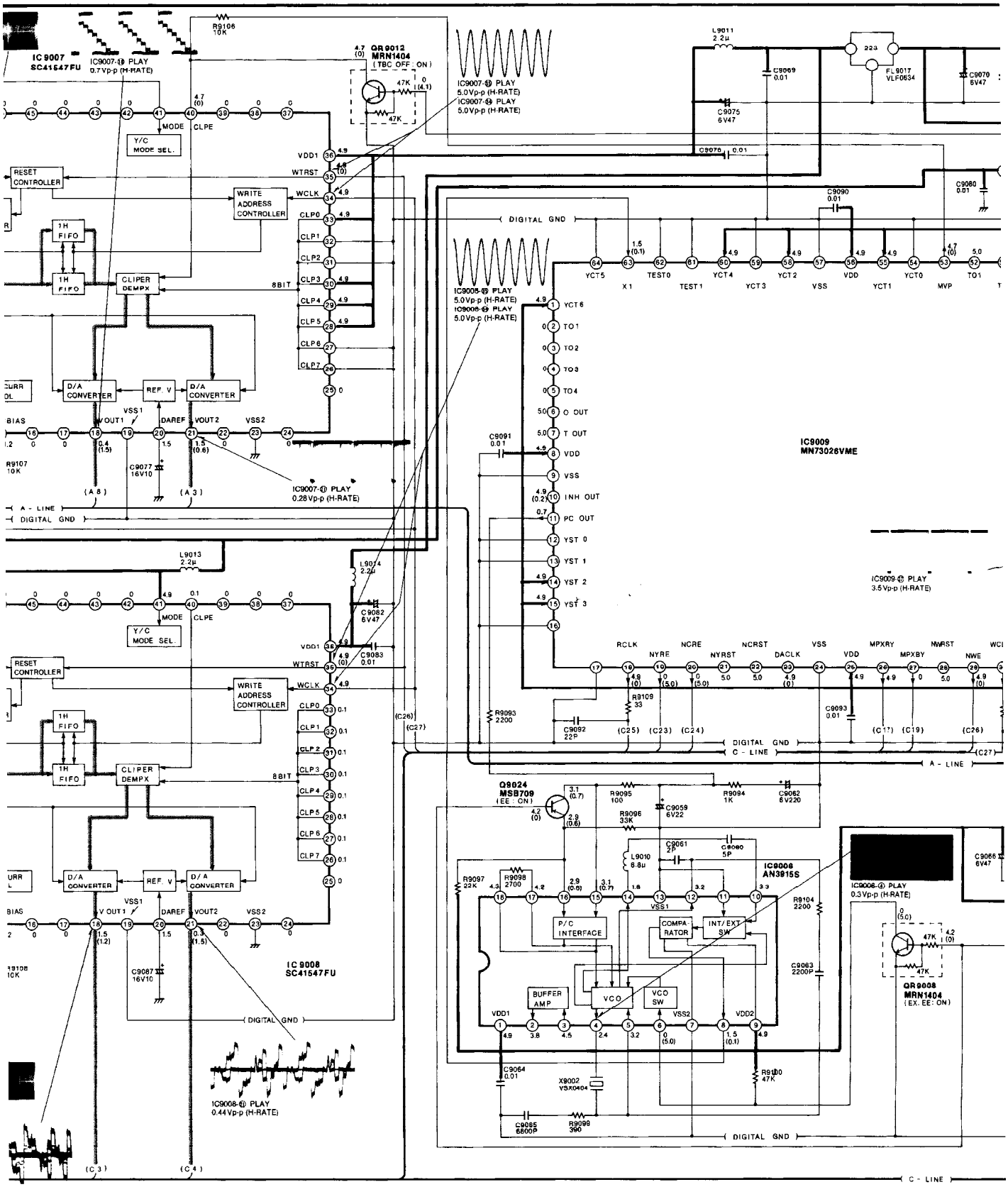


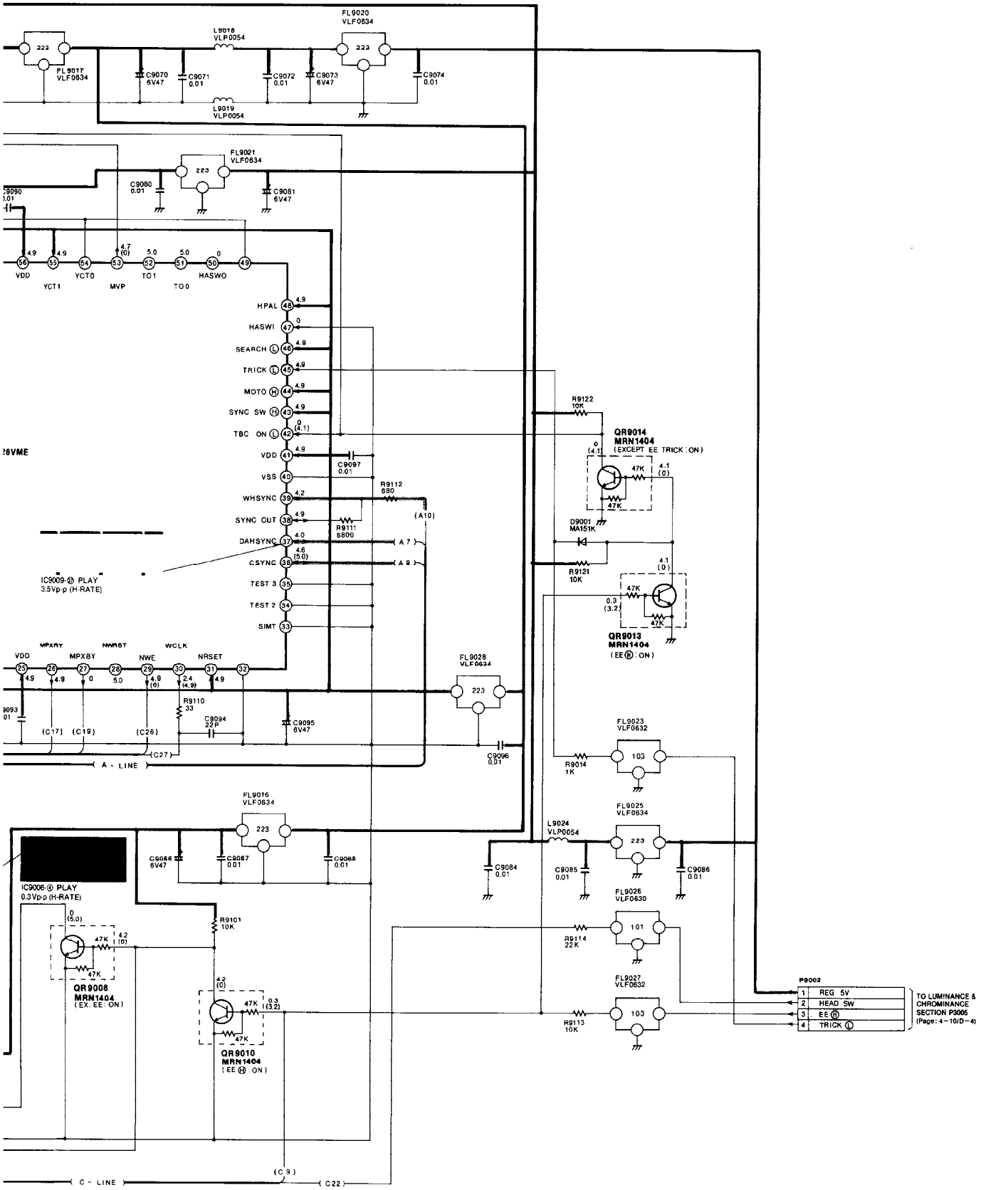
MAIN SIGNAL PATH IN PLAYBACK MODE



6 7 8 9 10 1


A - LINE
IC 9004
HA19211BNT
IC 9005
HA19211BNT
IC 9007
SC41547FU
DIGITAL GND
CLOCK DRIVER
COMPARATOR & LATCH
256 TO 6BIT X4 ENCODER
6BIT X4 TO 8BIT ENCODER & OUTPUT BUFFER
6BIT LATCH
RESET CONTROLLER
READ ADDRESS CONTROLLER
1H FIFO
BIAS CURR CONTROL
D/A CONVER
C - LNIE
IC9004-⑥ (H-RATE) REC: 1.3Vp-p PLAY: 1.7Vp-p
IC9004-⑦ PLAY 4.0Vp-p (V-RATE)
IC9004-⑧ PLAY 5.0Vp-p (H-RATE)
IC9005-⑥ PLAY 0.8Vp-p (H-RATE)
IC9005-⑦ PLAY 4.0Vp-p (V-RATE)
IC9007-③ PLAY 6.0Vp-p (H-RATE)
IC9007-④ PLAY 4.0Vp-p (V-RATE)
IC9008-③ PLAY 5.0Vp-p (H-RATE)
IC9008-④ PLAY 4.0Vp-p (V-RATE)
IC9008-⑦ PLAY 0.5Vp-p (H-RATE)
IC9002-⑤ PLAY 0.3Vp-p (V-RATE)
IC9002-⑥ PLAY 0.3Vp-p (V-RATE)
IC9002-⑦ REC 2.7Vp-p (H-RATE)
IC9002-⑧ PLAY 0.58Vp-p (H-RATE)

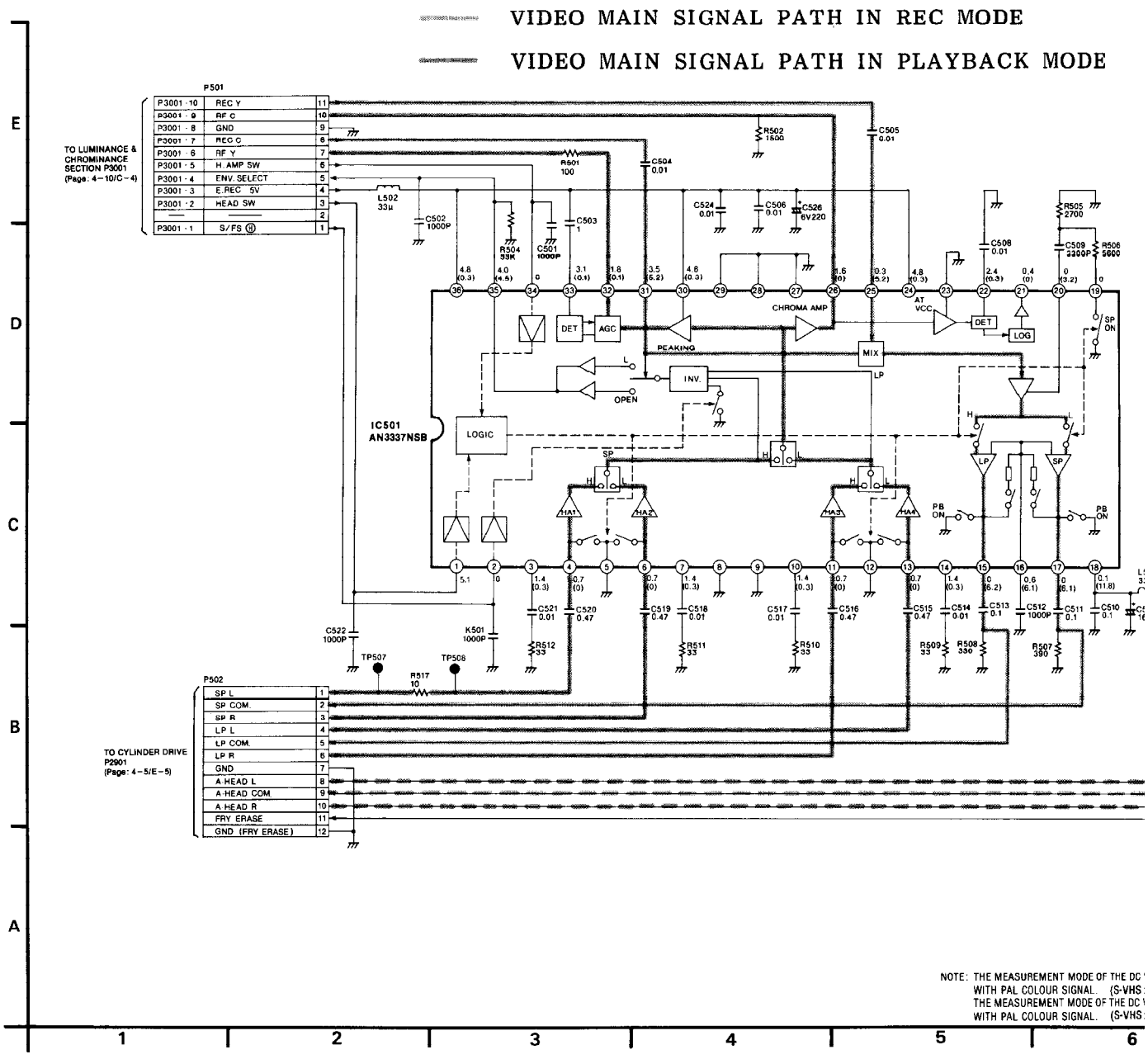

IC 9007
SC41547FU
IC9007-⑲ PLAY
0.7Vp-p (H-RATE)
R9106
10K
QR 9012
MRN1404
(TBC OFF : ON)
IC9007-⑬ PLAY
5.0Vp-p (H-RATE)
IC9007-⑭ PLAY
5.0Vp-p (H-RATE)
L9011
2.2μ
C9069
0.01
FL9017
VLF0634
C9070
6V47
C9075
6V47
C9076
0.01
C9080
0.01
C9090
0.01
MODE
CLPE
Y/C
MODE SEL.
RESET
CONTROLLER
WRITE
ADDRESS
CONTROLLER
1H
FIFO
CLIPER
DEMPX
8BIT
VDD1
WTRST
WCLK
CLP0
CLP1
CLP2
CLP3
CLP4
CLP5
CLP6
CLP7
DIGITAL GND
D/A
CONVERTER
REF V
VSS1
VOUT1
DAREF
VOUT2
VSS2
BIAS
C9077
16V10
(A 8)
(A 3)
IC9007-⑰ PLAY
0.28Vp-p (H-RATE)
A - LINE
IC9005-⑮ PLAY
5.0Vp-p (H-RATE)
IC9006-⑮ PLAY
5.0Vp-p (H-RATE)
YCT5
X1
TEST0
TEST1
YCT4
YCT3
YCT2
VSS
VDD
YCT1
MVP
TO1
YCT6
TO1
TO2
TO3
TO4
O OUT
T OUT
VDD
VSS
INH OUT
PC OUT
YST 0
YST 1
YST 2
YST 3
IC9009
MN73026VME
IC9009-⑰ PLAY
3.5Vp-p (H-RATE)
RCLK
NYRE
NCRE
NYRST
NCRST
DACLK
VSS
VDD
MPXRY
MPXBY
NWRST
NWE
L9013
2.2μ
L9014
2.2μ
C9082
6V47
C9083
0.01
R9109
33
R9093
2200
C9092
22P
C9093
0.01
C - LINE
Q9024
MSB709
(EE : ON)
R9095
100
R9096
33K
R9094
1K
C9062
6V220
C9059
6V22
C9061
2P
C9060
5P
L9010
6.8μ
IC9008
AN3915S
R9097
22K
R9098
2700
P/C
INTERFACE
COMPA
RATOR
INT/EXT
SW
R9104
2200
C9063
2200P
BUFFER
AMP
VCO
VCO
SW
VDD1
VSS2
VDD2
C9064
0.01
X9002
Y3X0404
R9100
47K
C9085
6800P
R9099
390
IC9008-④ PLAY
0.3Vp-p (H-RATE)
QR 9008
MRN1404
(EX. EE : ON)
IC 9008
SC41547FU
IC9008-⑱ PLAY
0.44Vp-p (H-RATE)
(C 3)
(C 4)
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE
WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)
(TBC SW, ON)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKI
WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)



OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE (S-VHS : SP MODE) (TBC SW, ON)

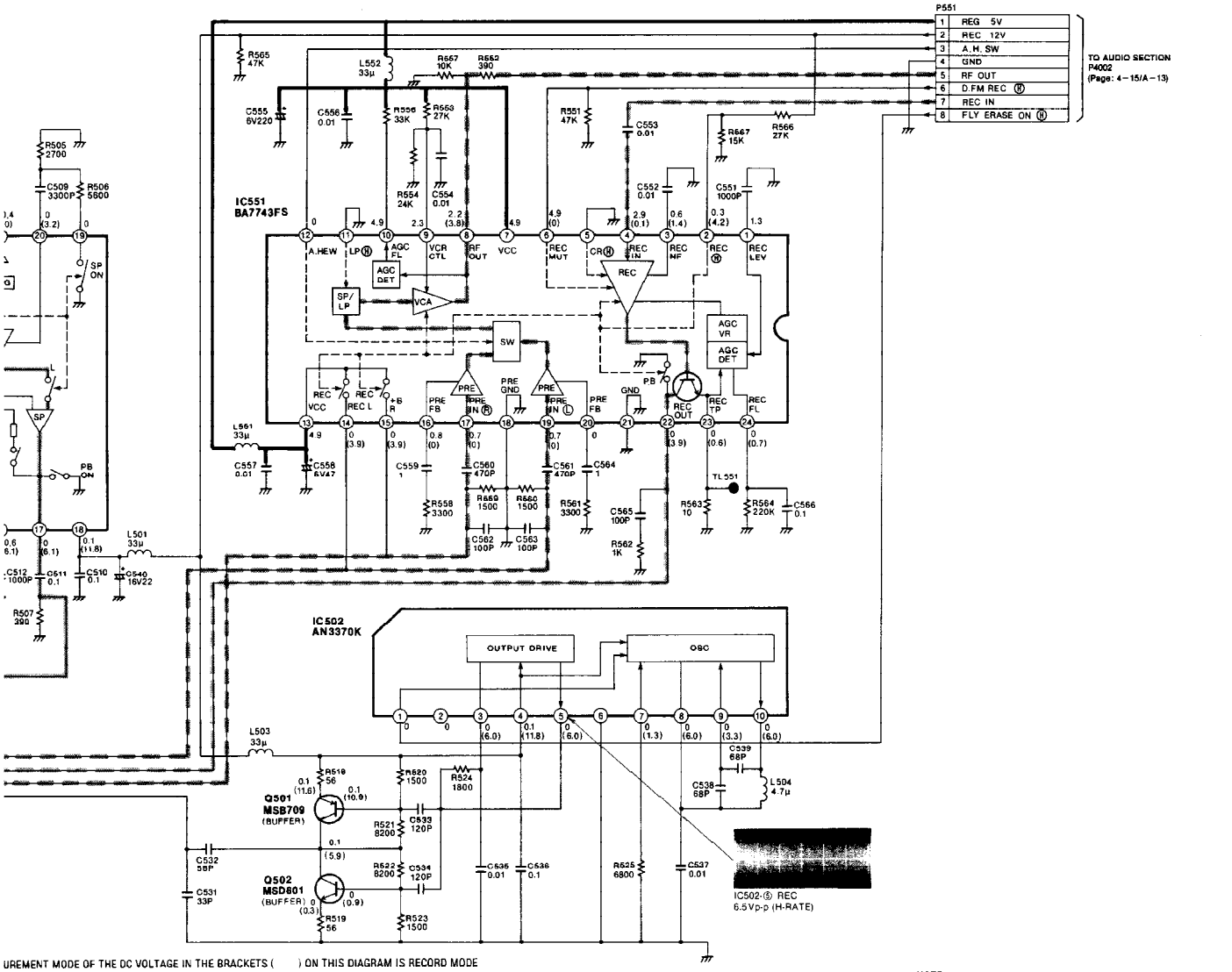
NOTE : DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-11. HEAD AMP SCHEMATIC DIAGRAM



Hi-Fi AUDIO MAIN SIGNAL PATH IN REC MODE

: MODE Hi-Fi AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE

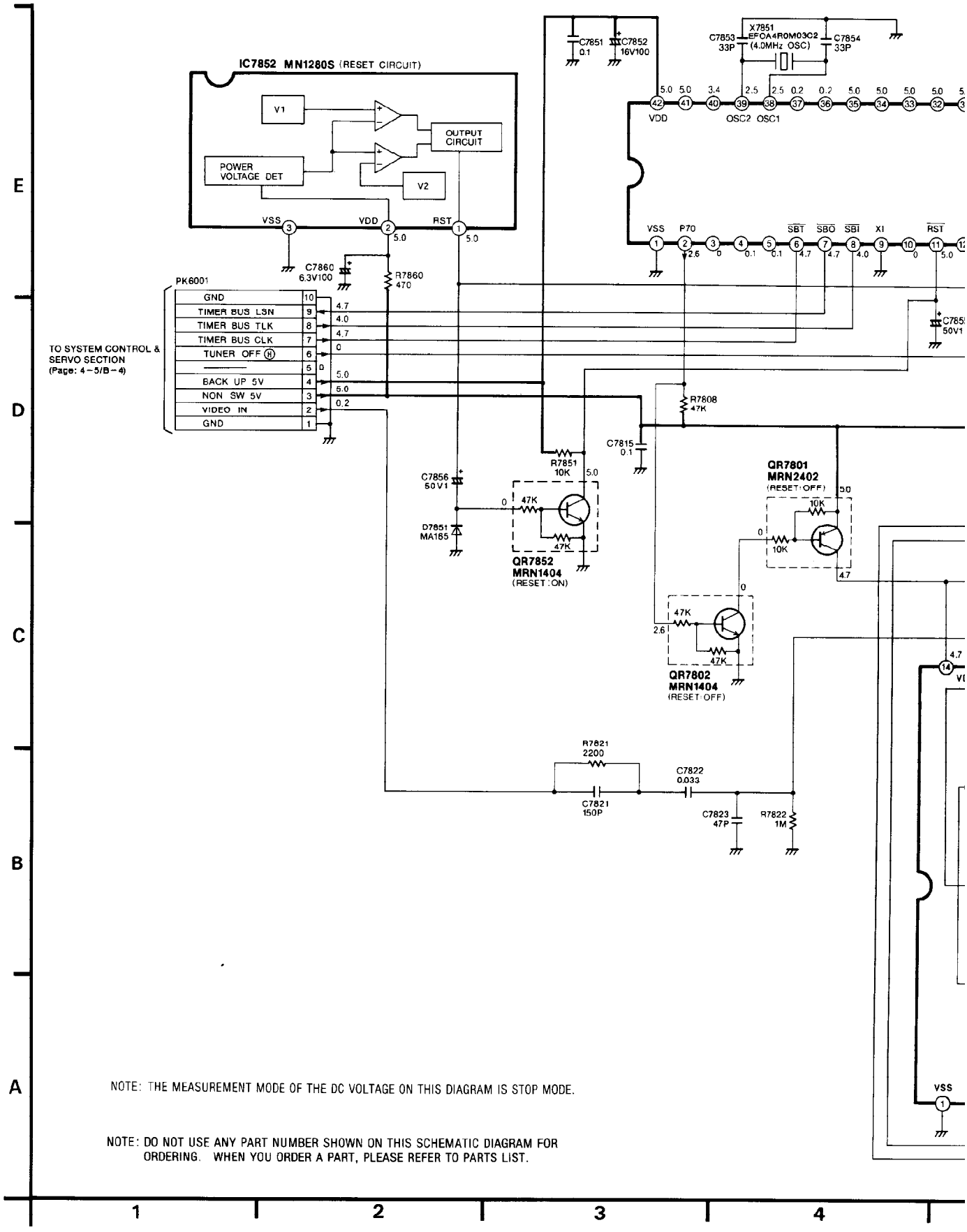


UREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE
COLOUR SIGNAL. (S-VHS: SP MODE)
UREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE
COLOUR SIGNAL. (S-VHS: SP MODE)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

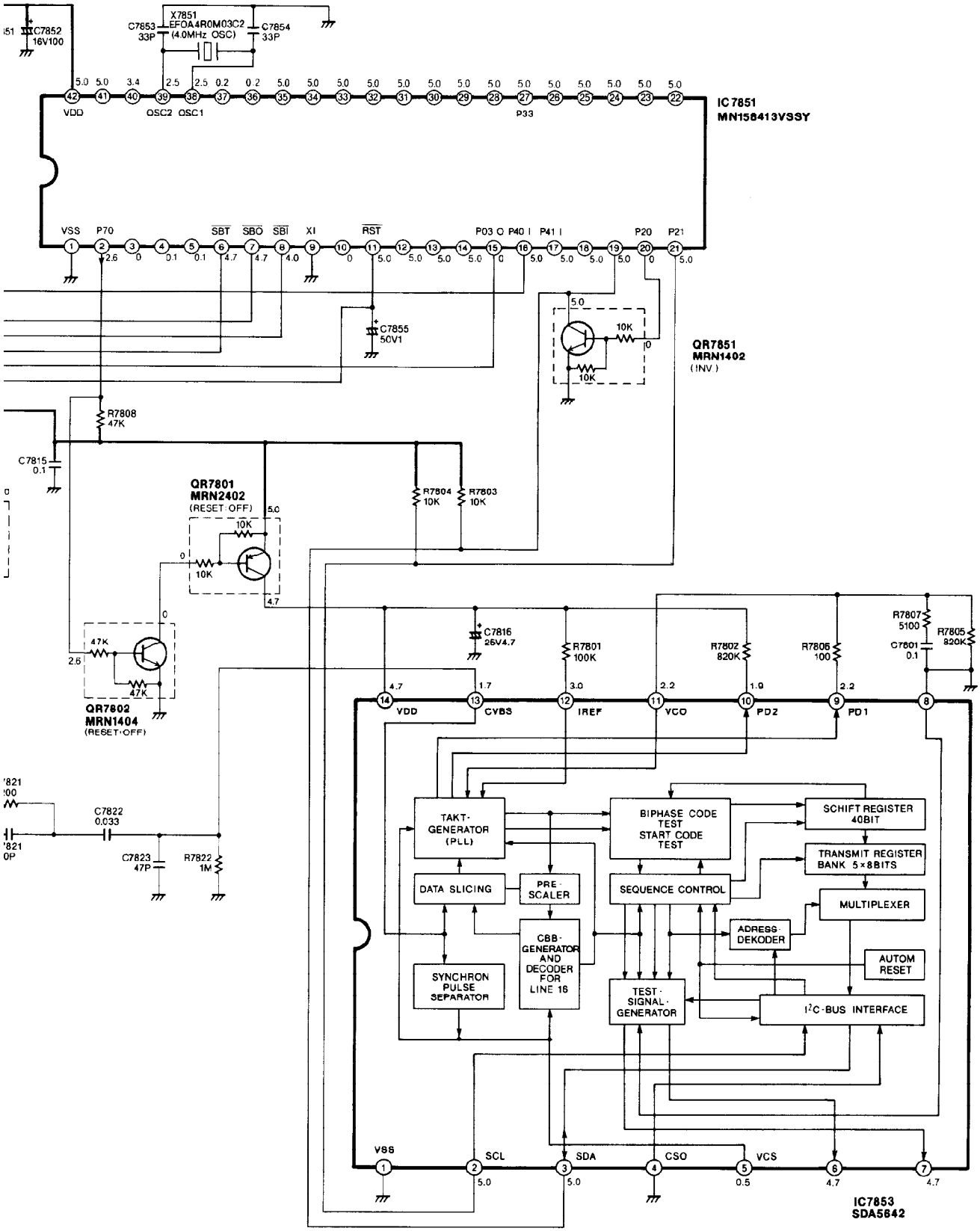
6 7 8 9 10 11

4-12. VPS PACK SCHEMATIC DIAGRAM

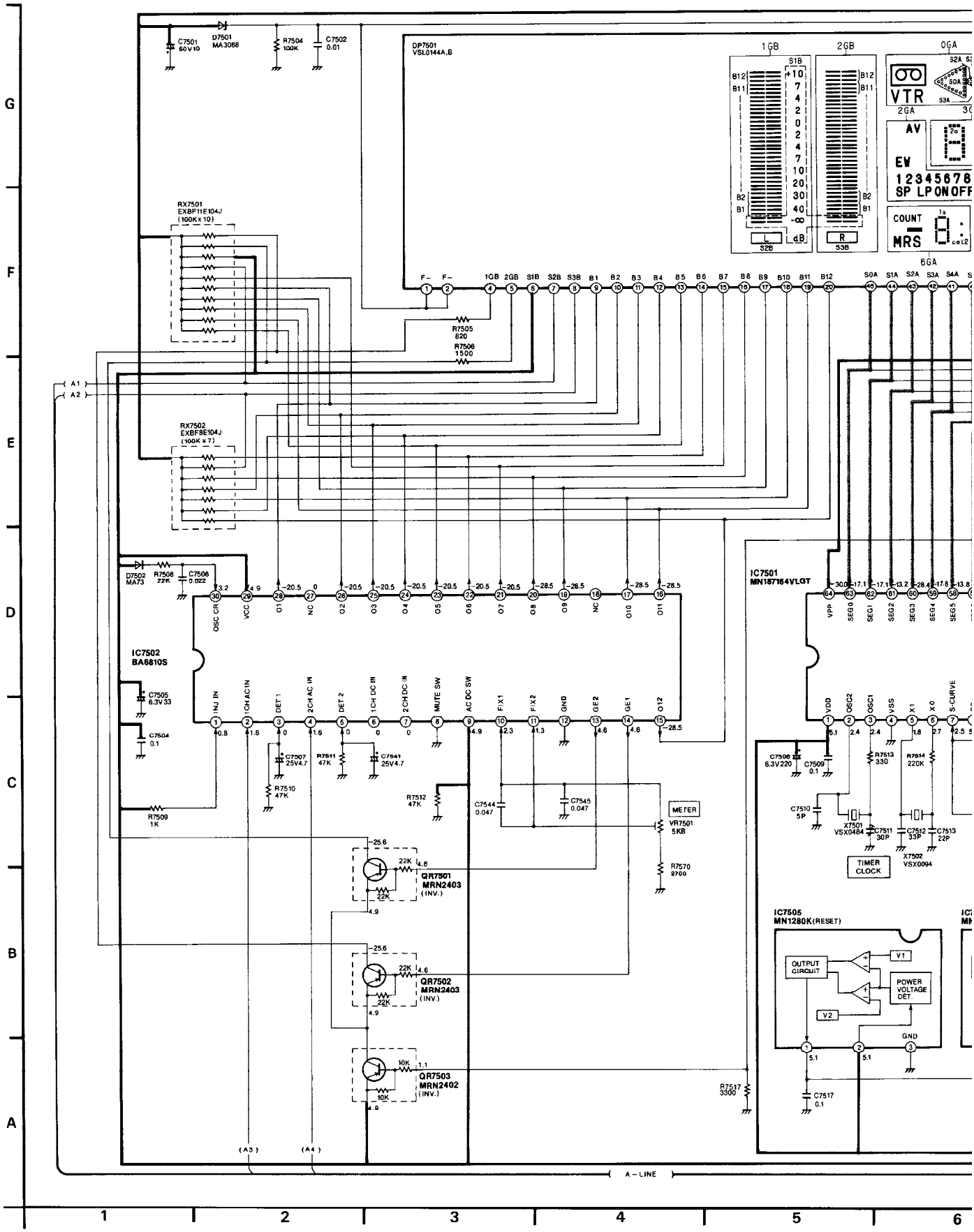


NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

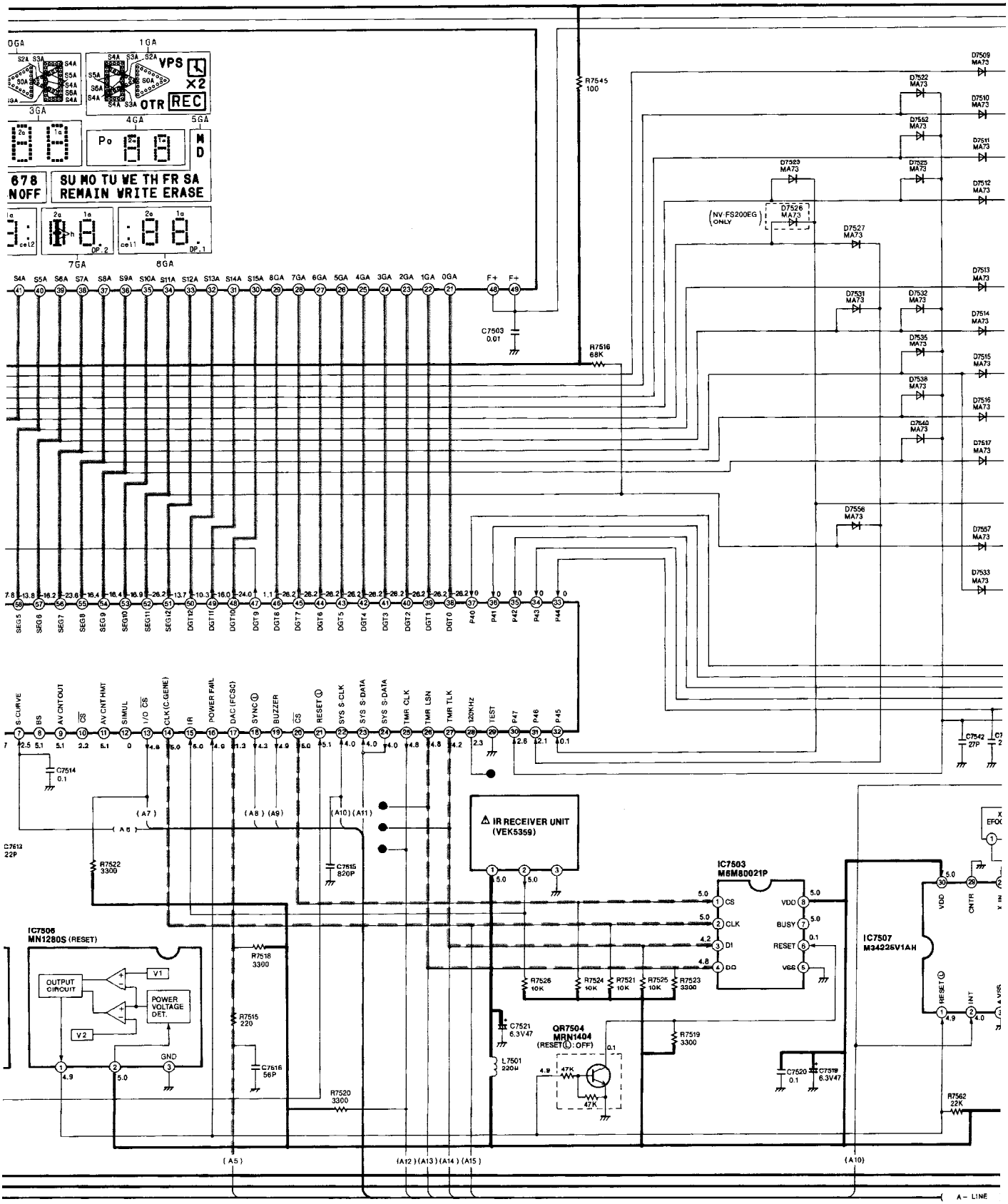
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.


X7851
EFOA4R0M03C2
(4.0MHz OSC)
C7852
16V100
C7853
33P
C7854
33P
IC7851
MN158413VS3Y
VDD
OSC2
OSC1
P33
VSS
P70
SBT
SBO
SBI
XI
RST
P03 O
P40 I
P41 I
P20
P21
C7855
50V1
QR7851
MRN1402
(INV.)
R7808
47K
C7815
0.1
QR7801
MRN2402
(RESET-OFF)
R7804
10K
R7803
10K
QR7802
MRN1404
(RESET-OFF)
C7816
25V4.7
R7801
100K
R7802
820K
R7806
100
R7807
5100
C7801
0.1
R7805
820K
VDD
CVBS
IREF
VCO
PD2
PD1
C7822
0.033
C7823
47P
R7822
1M
TAKT-
GENERATOR
(PLL)
BIPHASE CODE
TEST
START CODE
TEST
SCHIFT REGISTER
40BIT
TRANSMIT REGISTER
BANK 5×8BITS
DATA SLICING
PRE-
SCALER
SEQUENCE CONTROL
MULTIPLEXER
ADRESS-
DEKODER
CBB-
GENERATOR
AND
DECODER
FOR
LINE 16
AUTOM
RESET
SYNCHRON
PULSE
SEPARATOR
TEST-
SIGNAL-
GENERATOR
I²C-BUS INTERFACE
VSS
SCL
SDA
CSO
VCS
IC7853
SDA5642

4-13. TIMER & VR SCHEMATIC DIAGRAM

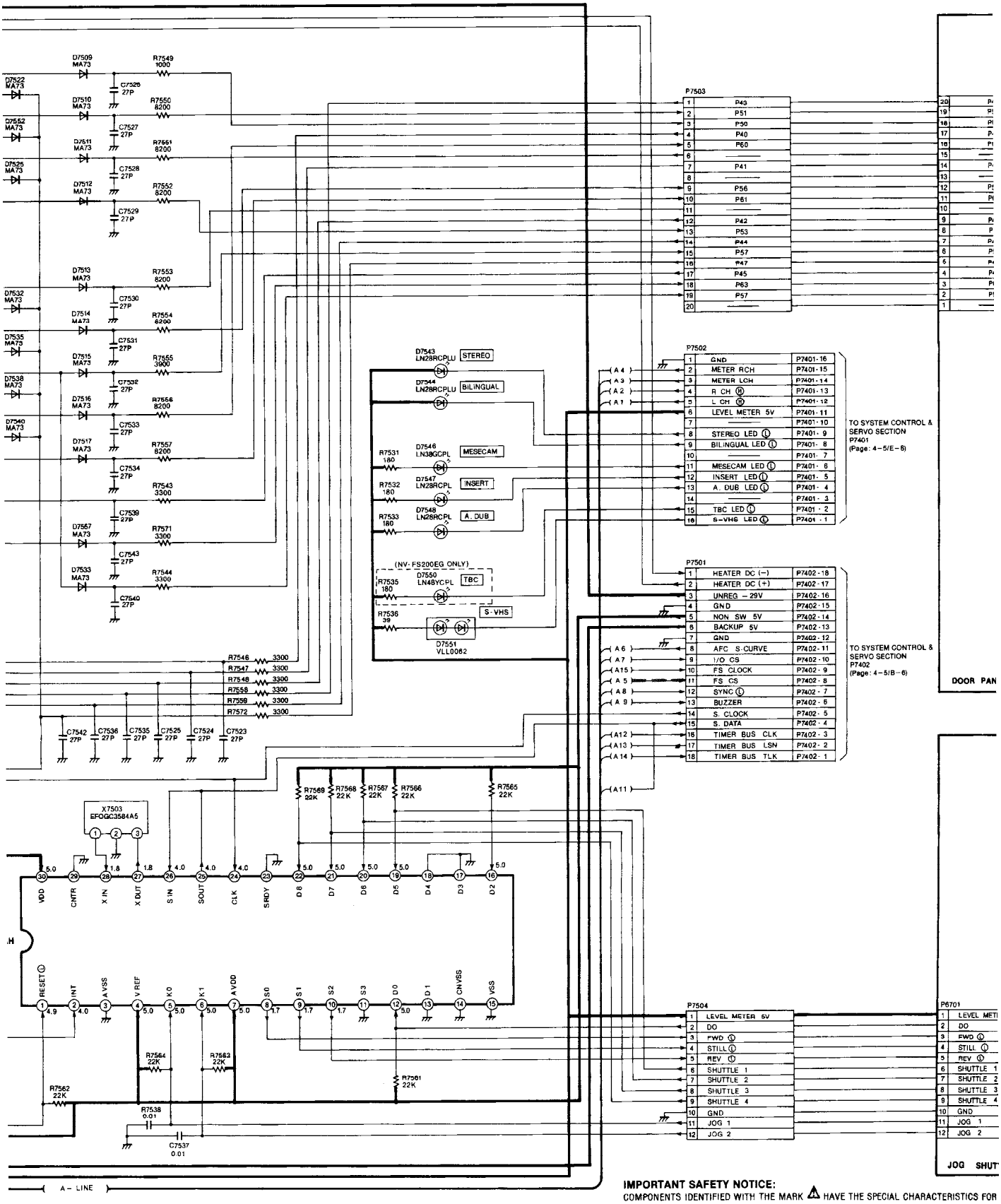


SEGMENT CONTROL SIGNAL GRID CONTROL SIGNAL TUNE CONT



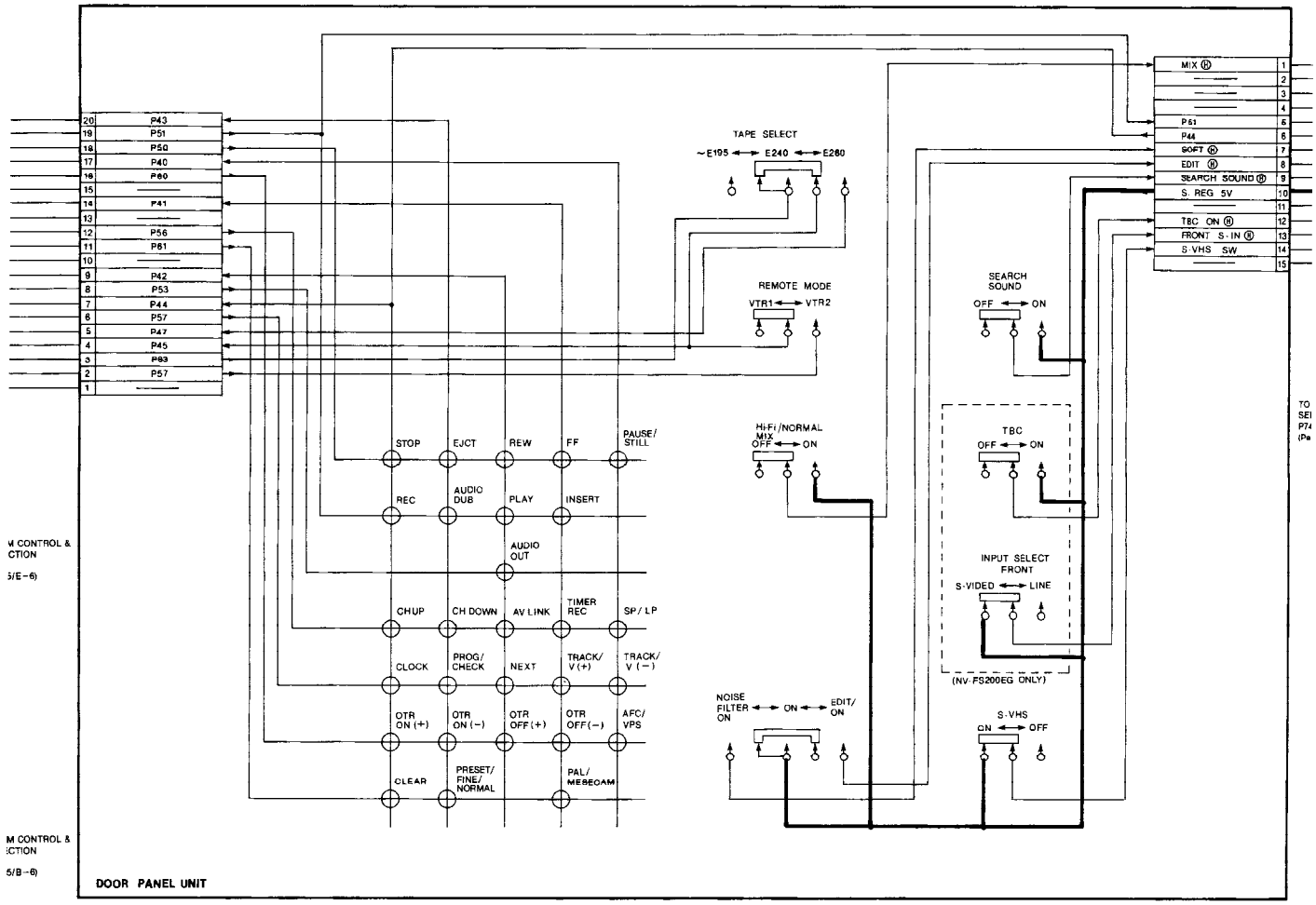
6 | 7 | 8 | 9 | 10 | 11

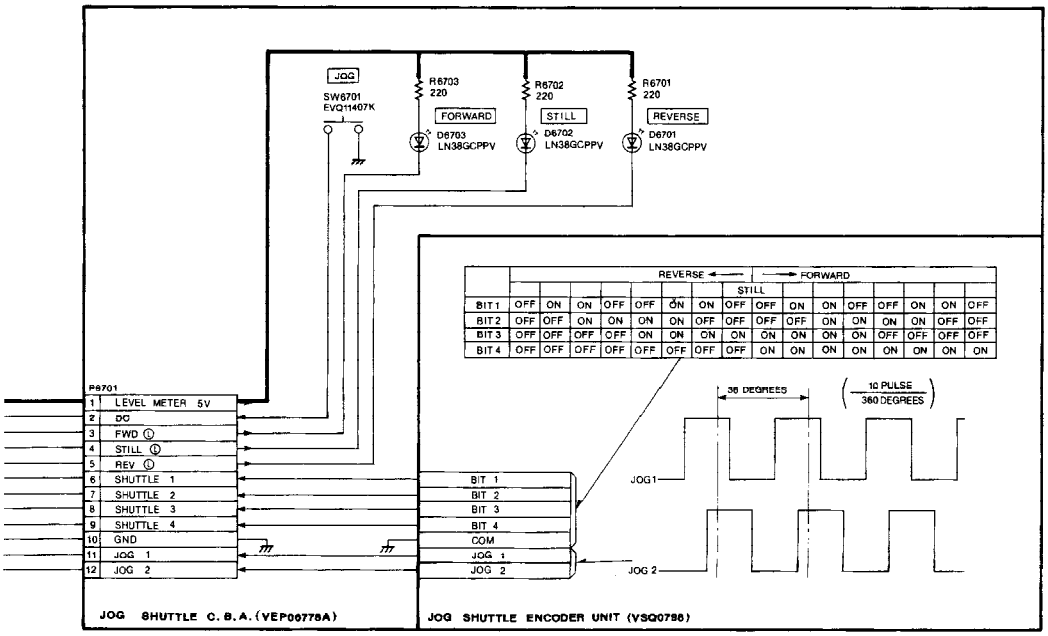
UNE CONTROL SIGNAL



IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR WHEN REPLACING ANY OF THESE COMPONENTS. USE ONLY THE SAME TYPE.

12 13 14 15 16

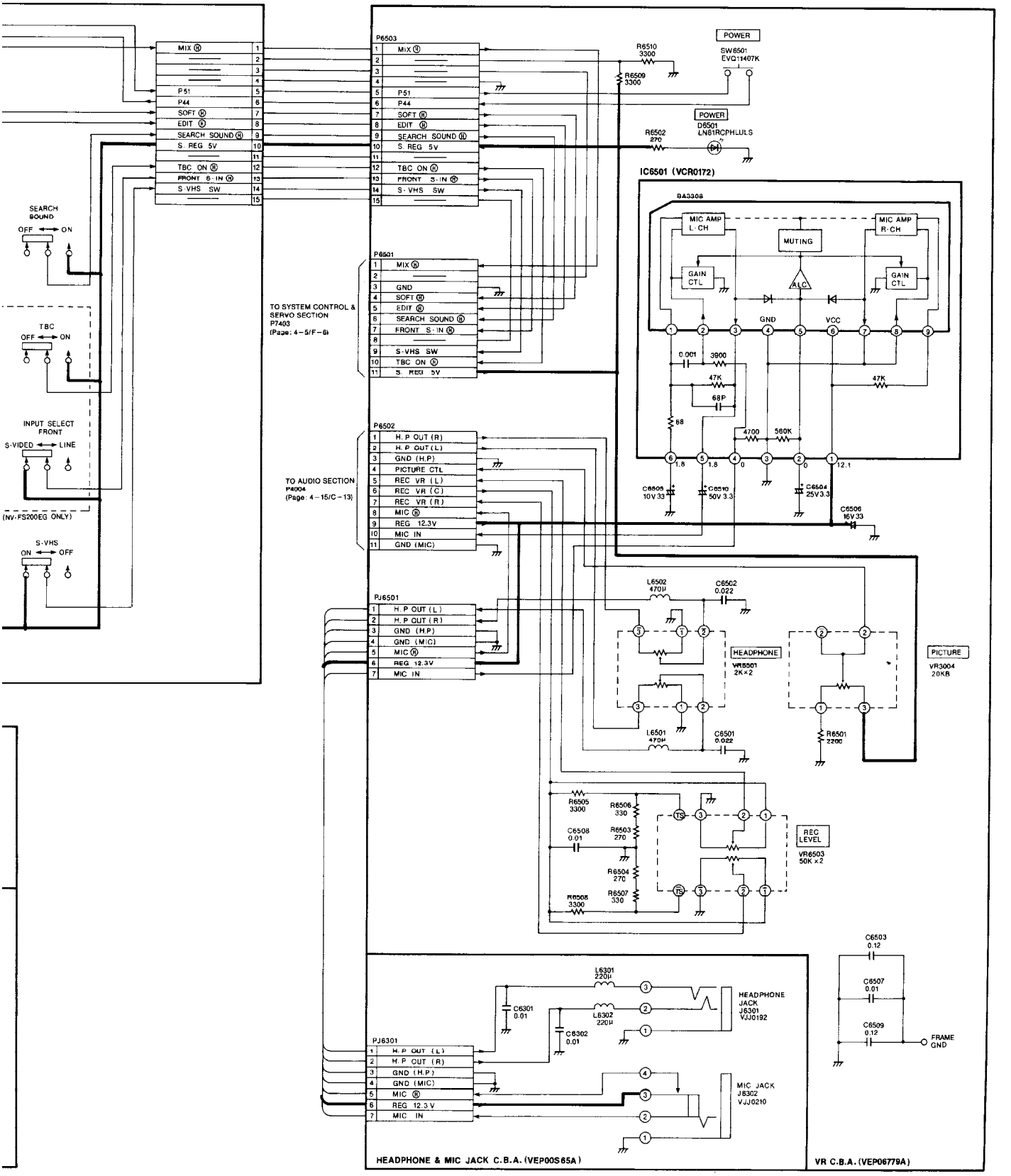




	REVERSE								STILL		FORWARD					
BIT 1	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF
BIT 2	OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF
BIT 3	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF
BIT 4	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON	ON	ON

ECIAL CHARACTERISTICS FOR SAFETY.
THE SAME TYPE.

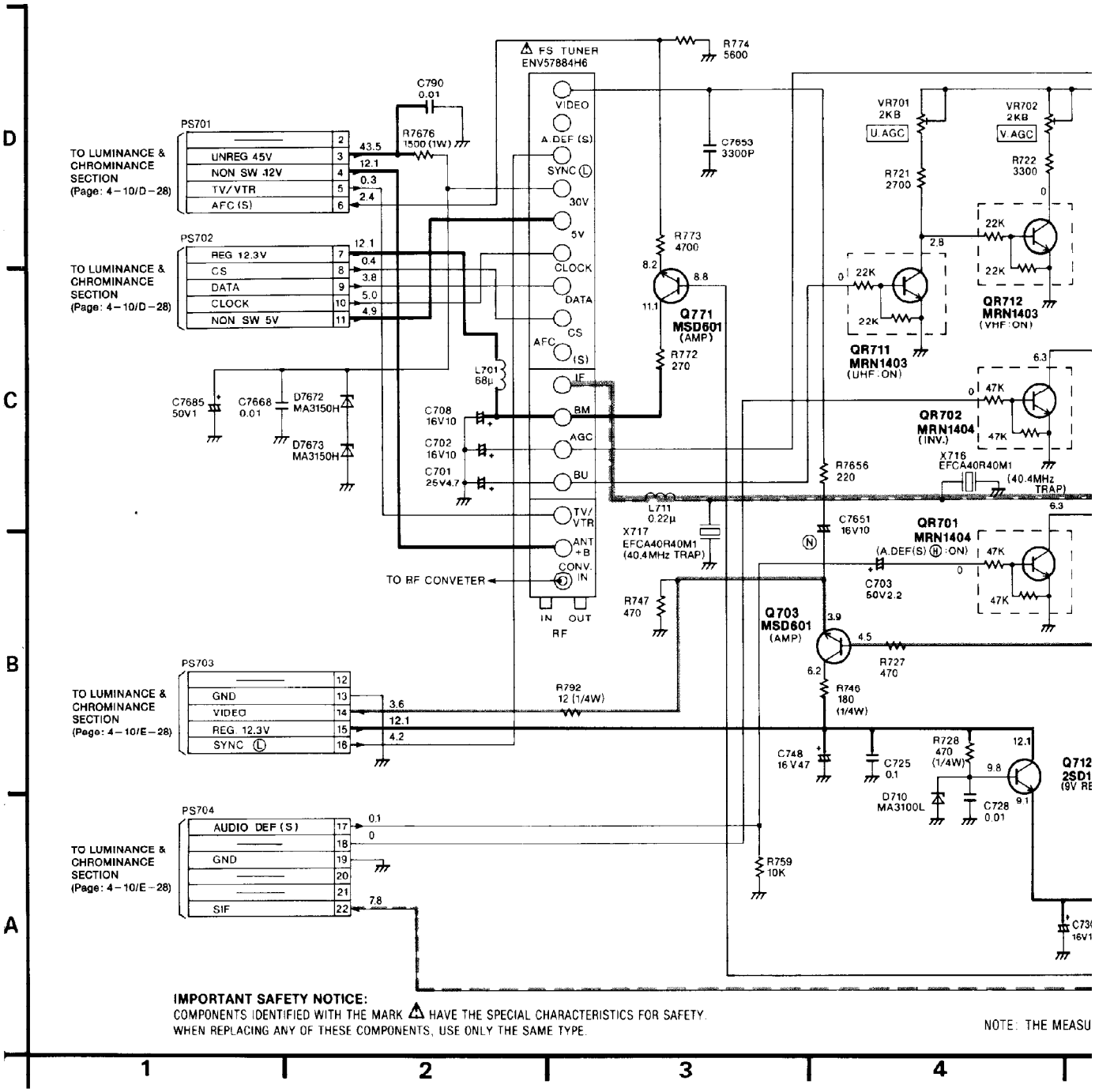
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE. (S-VHS: SP MODE)



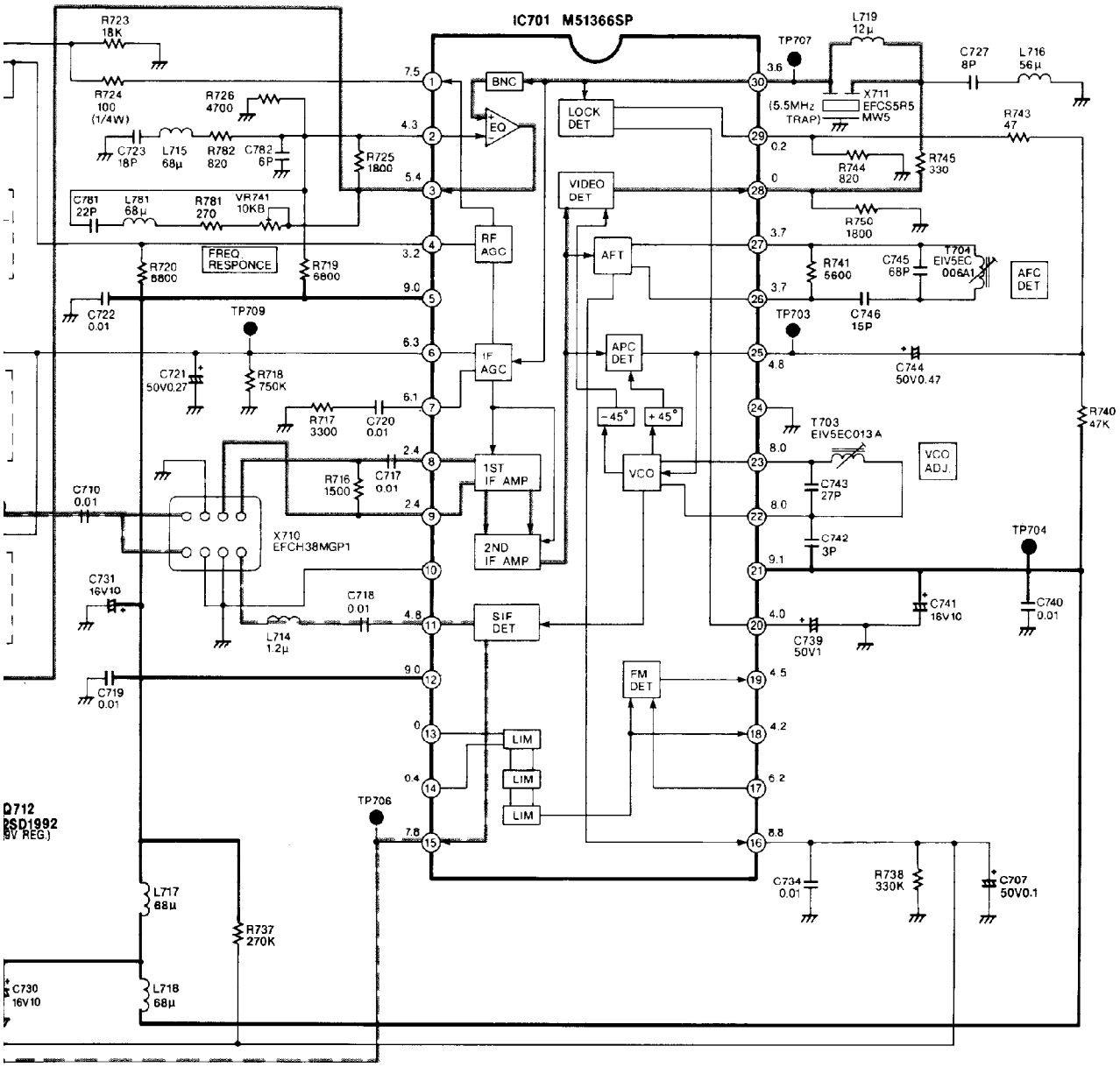
STOP MODE. (S-VHS: SP MODE)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-14. TV DEMODULATOR PACK SCHEMATIC DIAGRAM



VIDEO SIGNAL PATH AUDIO SIGNAL PATH

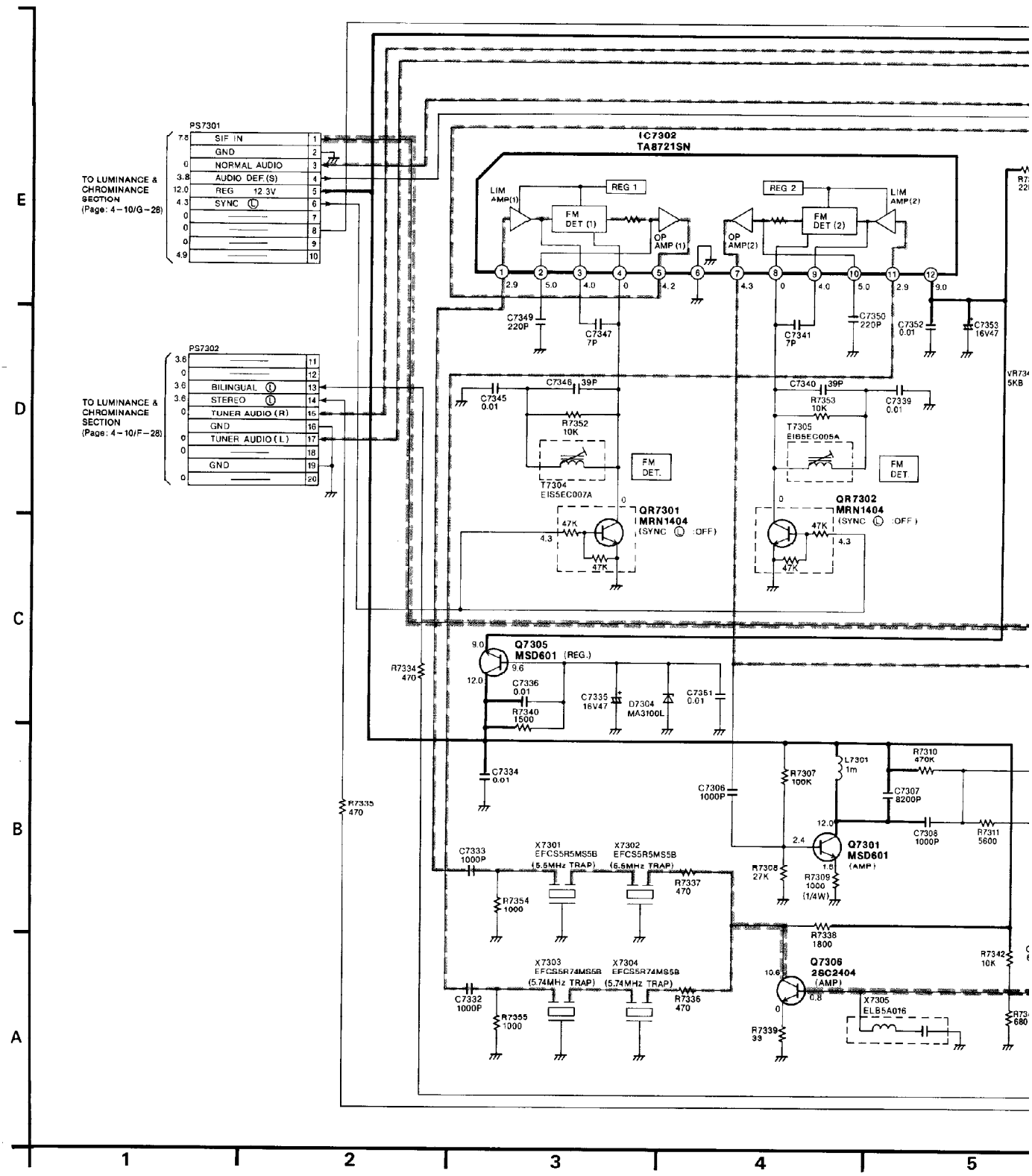


EASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

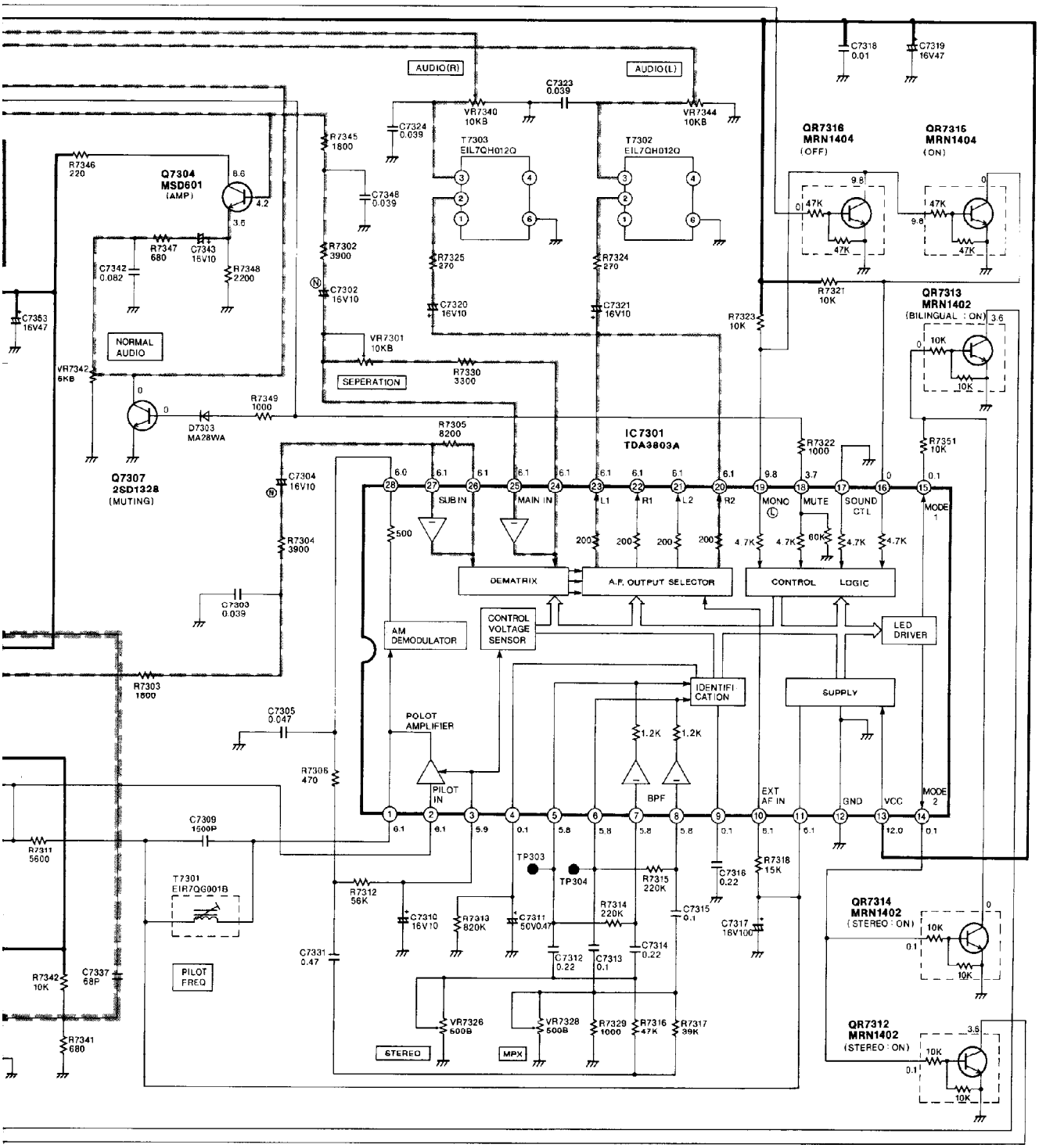
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-15. DECODER PACK SCHEMATIC DIAGRAM

AUDIO MAIN



:O MAIN SIGNAL PATH — — — AUDIO SUB SIGNAL PATH



NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

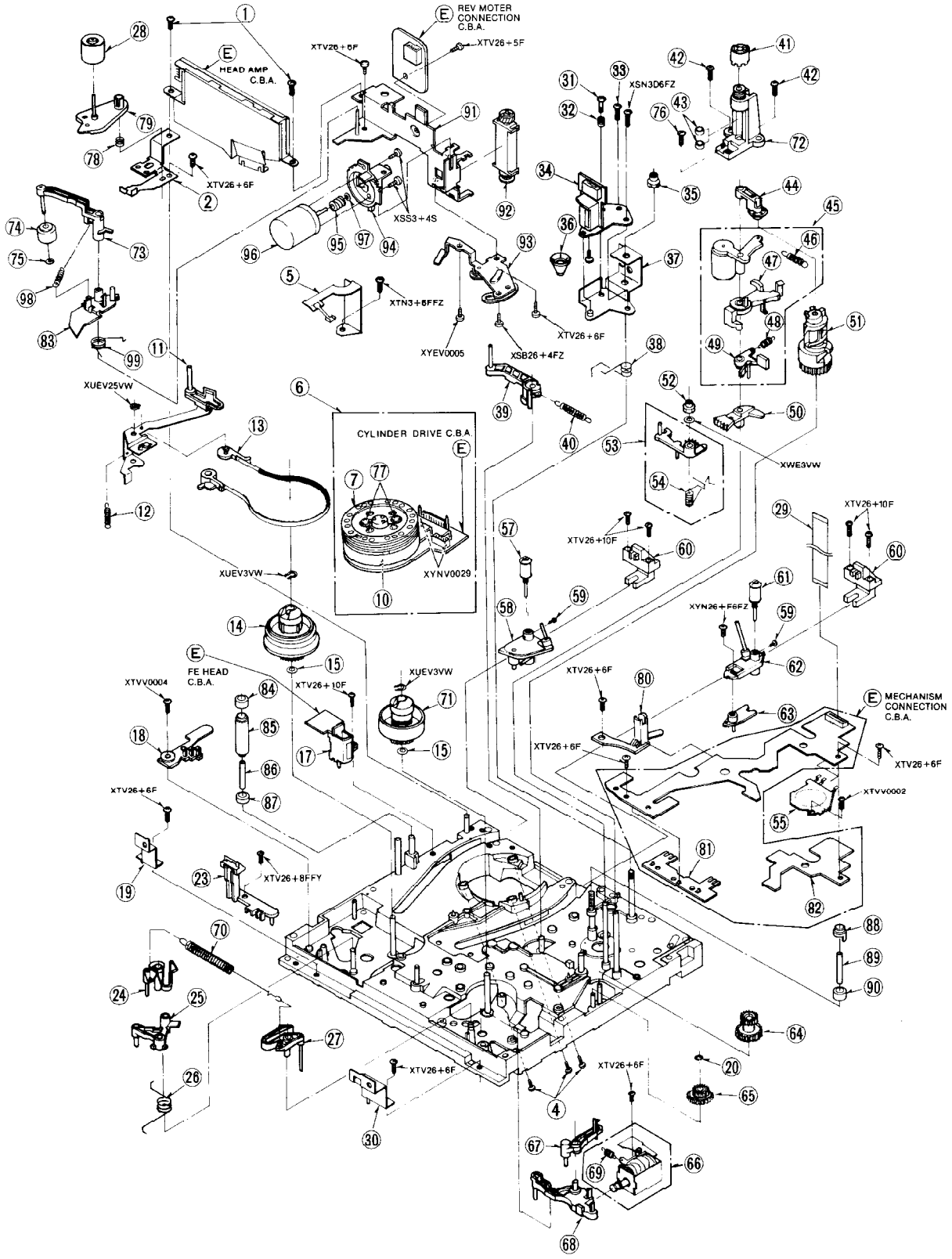
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

5 | 6 | 7 | 8 | 9

SECTION 5
EXPLODED VIEWS & PARTS LIST

5-1. EXPLODED VIEW & MECHANICAL REPLACEMENT PARTS LIST

❶ CHASSIS PARTS SECTION (1)

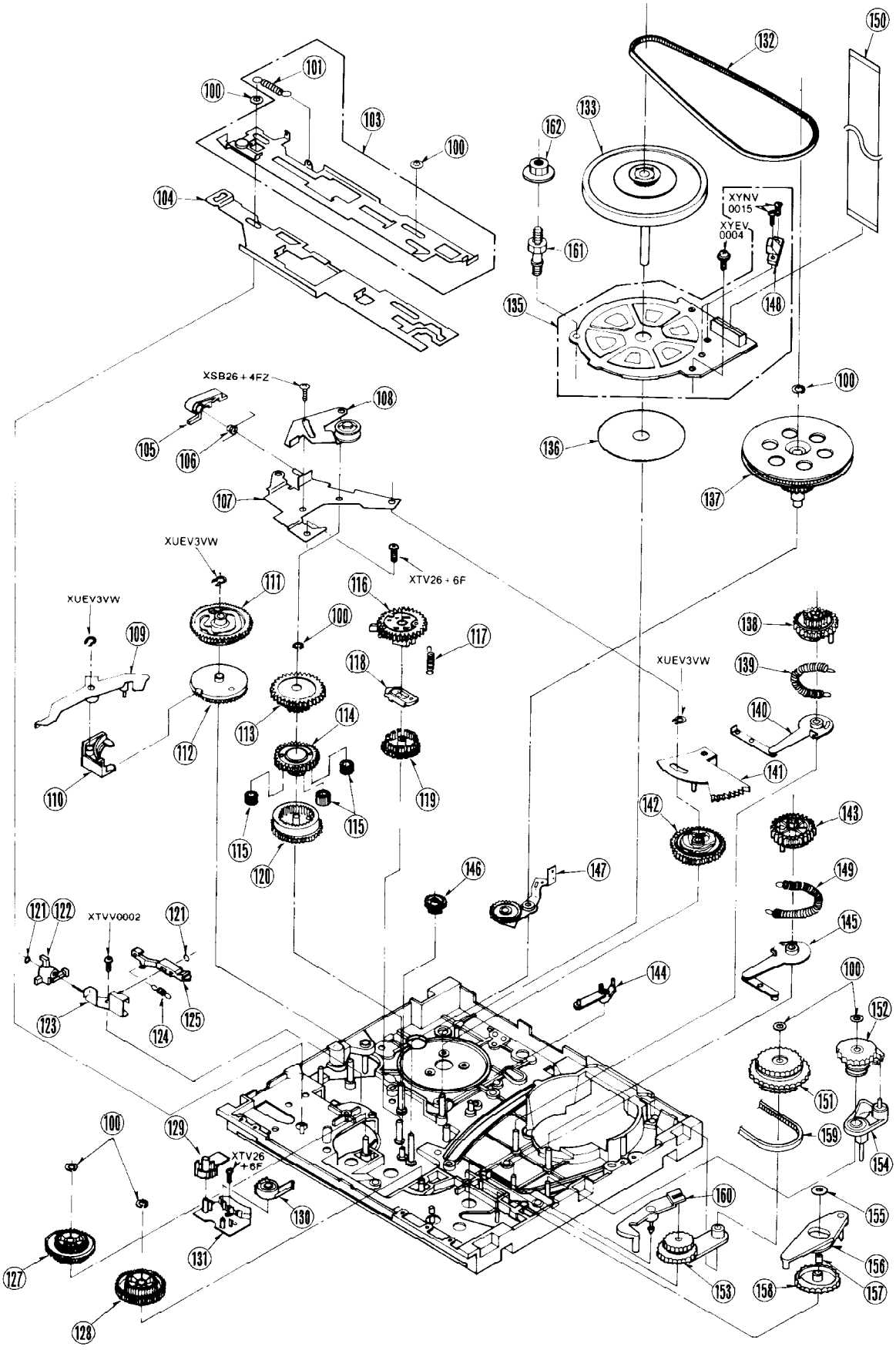


Note: 1.* Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components, use only the same type.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
1(1)		VHD0418	HEAD AMP SET SCREW	2	
2(1)		VMA7174	HEAD AMP MOUNT ANGLE	1	
4(1)		VHD0342	CYLINDER SCREW	3	
5(1)		VXA2702	EARTH PLATE UNIT	1	
6(1)		VEG0769	CYLINDER UNIT	1	<!>
7(1)		VEH0467	UPPER CYLINDER UNIT	1	
10(1)		VSC2188	CYLINDER C.B.A.SHIELD PLATE	1	
11(1)		VXL1855	TENSION ARM (1) UNIT	1	
12(1)		VMB1563	TENSION SPRING	1	
13(1)		VXZ0267	TENSION BAND UNIT	1	
14(1)		VXR0179	SUPPLY REEL TABLE UNIT	1	
15(1)		VMX1171	REEL WASHER (0.5mm)	2	
15(1)		VMX1239	REEL WASHER (0.3mm)	2	
15(1)		VMX1238	REEL WASHER (0.2mm)	2	
17(1)		VBS0038	FE HEAD	1	
18(1)		VMD1316	TENSION SPRING HOOK	1	
19(1)		VMA6895	MOUNT ANGLE (L)	1	
20(1)		VMX1079	CUT WASHER	1	
23(1)		VES0486	SAFETY SW	1	
24(1)		VXZ0259	SUPPLY MAIN BRAKE UNIT	1	
25(1)		VXZ0274	SUPPLY SOFT BRAKE(1)UNIT	1	
26(1)		VMB1564	SUPPLY SOFT BRAKE SPRING	1	
27(1)		VXZ0262	TAKE UP MAIN BRAKE UNIT	1	
28(1)		VXP1092	IMPEDANCE ROLLER UNIT	1	
29(1)		VWJ0357	FLEXIBLE CADE (15P)	1	(P6001-P1504)
30(1)		VMA6896	MOUNT ANGLE (R)	1	
31(1)		VHD0322	ADJUST SCREW	1	
32(1)		VMB1251	ADJUST SPRING	1	
33(1)		VHD0089B	AZIMUTH ADJUST SCREW	1	
34(1)		VED0082	A/C HEAD (1) UNIT	1	
35(1)		VHN0063	M4 NYLON NUT	1	
36(1)		VHN0110	ADJUST NUT	1	
37(1)		VMA7831	HEAD BASE	1	
38(1)		VMB1567	A/C HEAD SPRING	1	
39(1)		VXL1857	SUB LOADING ARM (1) UNIT	1	
40(1)		VMB1566	SUB POST SPRING	1	
41(1)		VXQ0006	THRUST SCREW UNIT	1	
42(1)		VHD0317	HOUSING SCREW	2	
43(1)		VMX1033	OIL SEAL	2	
44(1)		VMX1353	PINCH CAM CAP	1	
45(1)		VXL1858	PRESSURE ROLLER UNIT	1	
46(1)		VMB1941	PIN PRESSURE SPRING	1	
47(1)		VML2232	PINCH PRESSURE ARM	1	
48(1)		VMB1569	PINCH PRESSURE ARM RELEASE SPRING	1	
49(1)		VML1874	PINCH LIFT ARM	1	
50(1)		VDG0597	P5 PULL OUT SECTOR GEAR	1	
51(1)		VDG0421	PINCH CAM	1	
52(1)		VHD0045	M3 NYLON NUT	1	
53(1)		VXL2027	P5 UNIT	1	
54(1)		VMB2718	P5 SPRING	1	
55(1)		VSS0175	MODE SW	1	
57(1)		VXP1093	ROLLER POST (S) UNIT	1	
58(1)		VXA4106	INCLIND BASE (S)(1)UNIT	1	
59(1)		VHD0133	ROLLER POST SCREW	2	
60(1)		VMD0910	POST STOPPER	2	
61(1)		VXP1094	ROLLER POST (T) UNIT	1	
62(1)		VXA3876	INCLIND BASE(T)(1)UNIT	1	
63(1)		VXA2687	INCLIND ADJUST PLATE UNIT	1	
64(1)		VDG0483	PINCH SPEED DOWN GEAR	1	
65(1)		VDG0664	CONNECTION GEAR	1	
66(1)		VEK3347	SOLENOID UNIT	1	
67(1)		VXA2692	KICK ROD UNIT	1	
68(1)		VML2048	SOLENOID LEVER	1	
69(1)		VMB1553	KICK ROD SPRING	1	
70(1)		VMB2012	MAIN BRAKE SPRING	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
71(1)		VXR0176	TAKE UP REEL TABLE UNIT	1	
72(1)		VXD0101	HOUSING UNIT	1	
73(1)		VXL2086	CLEANNER ARM (2) UNIT	1	
74(1)		VXP1341	CLEANNER ROLLER UNIT	1	
75(1)		VMX1061	SNAP WASHER (A)	1	
76(1)		VHD0374	HOUSING SCREW	1	
77(1)		VHD0553	UPPER CYLINDER SCREW	2	
78(1)		VMB1741	IMPEDANCE ARM SPRING	1	
79(1)		VML2308	IMPEDANCE ROLLER ARM	1	
80(1)		VXA3520	LED HOLDER UNIT	1	
81(1)		VMA7829	REINFORCEMENT PLATE (F)	1	
82(1)		VMA7830	REINFORCEMENT PLATE (R)	1	
83(1)		VML2510	CLEANNER ARM (B)		
84(1)		VMX1088	SUPPLY UPPER LIMITER	1	
85(1)		VDP1304	SUPPLY ROLLER	1	
86(1)		VMX1581	P1 COLLAR	1	
87(1)		VMX1533	SUPPLY LOWER LIMITER	1	
88(1)		VMX1544	P4 UPPER LIMITER	1	
89(1)		VMX1568	P4 SLEEVE	1	
90(1)		VMX1534	P4 LOWER LIMITER	1	
91(1)		VXA4317	MOTOR MOUNT PLATE UNIT	1	
92(1)		VXA3517	WORM WHEEL BEARING UNIT	1	
93(1)		VXA4315	TENSION PULLEY BASE (A) UNIT	1	
94(1)		VXA3564	REEL MOTOR BRACKET UNIT	1	
95(1)		VXP1208	WORM GEAR UNIT	1	
96(1)		VEM0320	REV MOTOR	1	
97(1)		VMX1734	WORM WASHER	1	
98(1)		VMB2263	CLEANNER ARM SPRING (A)	1	
99(1)		VMB2264	CLEANNER ARM SPRING (B)	1	

❷ CHASSIS PARTS SECTION (2)



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Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
100(2)		VMX1079	CUT WASHER	8	
101(2)		VMB1883	SUB LEVER SPRING	1	
103(2)		VXA3510	SUB LEVER UNIT	1	
104(2)		VMM0204	MAIN LEVER	1	
105(2)		VXL2088	SS BRAKE ARM UNIT	1	
106(2)		VMB1588	SS BRAKE SPRING	1	
107(2)		VXA3512	SS BRAKE BASE (1) UNIT	1	
108(2)		VXA3516	TENSION ROLLER UNIT	1	
109(2)		VXL1632	CAM FOLLOWER ARM UNIT	1	
110(2)		VML1861	DETENT ARM	1	
111(2)		VDG0574	MAIN CAM GEAR	1	
112(2)		VDG0343	SUB CAM GEAR	1	
113(2)		VDG0348	CENTRE GEAR	1	
114(2)		VDG0422	RETAINER GEAR	1	
115(2)		VDG0345	PLANET GEAR	3	
116(2)		VDG0547	CLUTCH DISK	1	
117(2)		VMB1558	CLUTCH SPRING	1	
118(2)		VDG0350	LOCK SLIDE GEAR	1	
119(2)		VDG0335	DRIVE DISK	1	
120(2)		VDG0342	RING GEAR	1	
121(2)		VMX0967	CUT WASHER	2	
122(2)		VML1859	CHANGE LEVER	1	
123(2)		VXA2672	RELEASE LEVER (1) UNIT	1	
124(2)		VMB1557	RELEASE SPRING	1	
125(2)		VML1860	RELEASE LEVER	1	
127(2)		VXP1031	TAKE UP REEL GEAR UNIT	1	
128(2)		VXP0981	SUPPLY REEL GEAR UNIT	1	
129(2)		VML1858	RETURN LEVER (R)	1	
130(2)		VML1857	RETURN LEVER (L)	1	
131(2)		VMD0913	STOPPER BASE	1	
132(2)		VDV0169	TIMING BELT	1	
133(2)		VXP1113	ROTOR UNIT	1	
135(2)		VEK4097	STATOR UNIT	1	<!>
136(2)		VMA6847	SUB PLATE	1	
137(2)		VXP1050	CENTRE PULLEY UNIT	1	
138(2)		VDG0564	LOADING GEAR (T)	1	
139(2)		VMB1555	LOADING SPRING (T)	1	
140(2)		VXL1489	LOADING ARM (T)(1) UNIT	1	
141(2)		VXA3515	SECTOR GEAR UNIT	1	
142(2)		VDG0516	LOADING CAM GEAR	1	
143(2)		VDG0419	LOADING GEAR (S)	1	
144(2)		VML2266	PLAY CONTROL ARM	1	
145(2)		VXL1487	LOADING ARM (S)(1) UNIT	1	
146(2)		VDG0546	INTERMEDIATE GEAR	1	
147(2)		VXL1861	PLAY ARM UNIT	1	
148(2)		VBK0048	FG HEAD	1	
149(2)		VMB1746	LOADING SPRING(S)	1	
150(2)		VWJ0613B	FLEXIBLE CADE (15P)	1	(P2501-CAPSTAN)
151(2)		VXP1029	REVIEW CLUTCH UNIT	1	
152(2)		VXP1030	TENSION RELEASE CLUTCH UNIT	1	
153(2)		VXL1851	REVIEW ARM UNIT	1	
154(2)		VML2197	TENSION RELEASE LEVER	1	
155(2)		VMX1536	CUT WASHER	1	
156(2)		VML2233	SUB CAM FOLLOWER	1	
157(2)		VMX1495	RUBBER STOPPER	1	
158(2)		VDG0517	SUB LEVER CAM	1	
159(2)		VDV0199	REVIEW CLUTCH TIMING BELT	1	
160(2)		VML2200	REVIEW CONTROL LEVER	1	
161(2)		VHD0431	STATOR SPACER SCREW	1	
162(2)		VHN0102	STATOR NUT	1	

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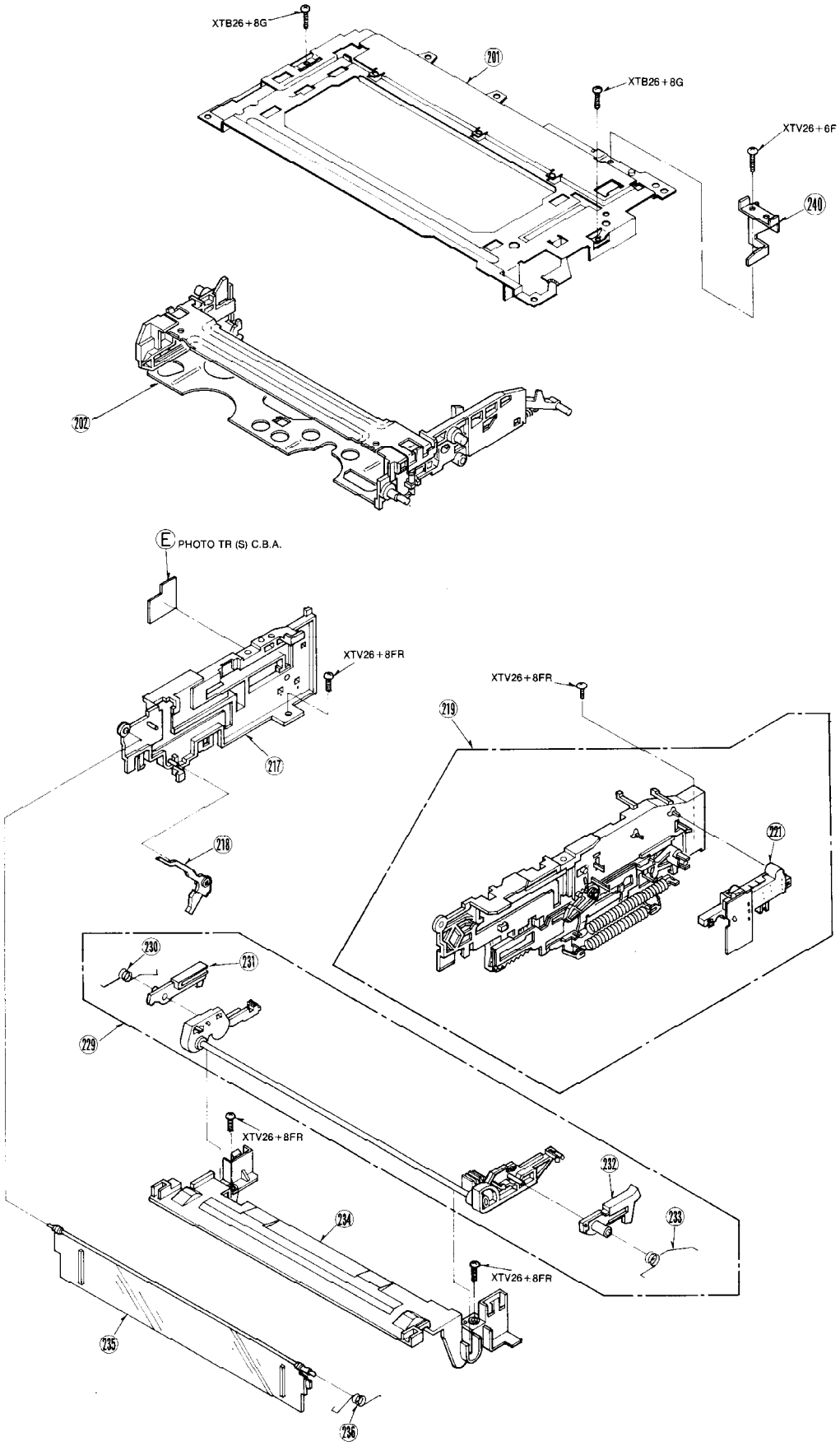
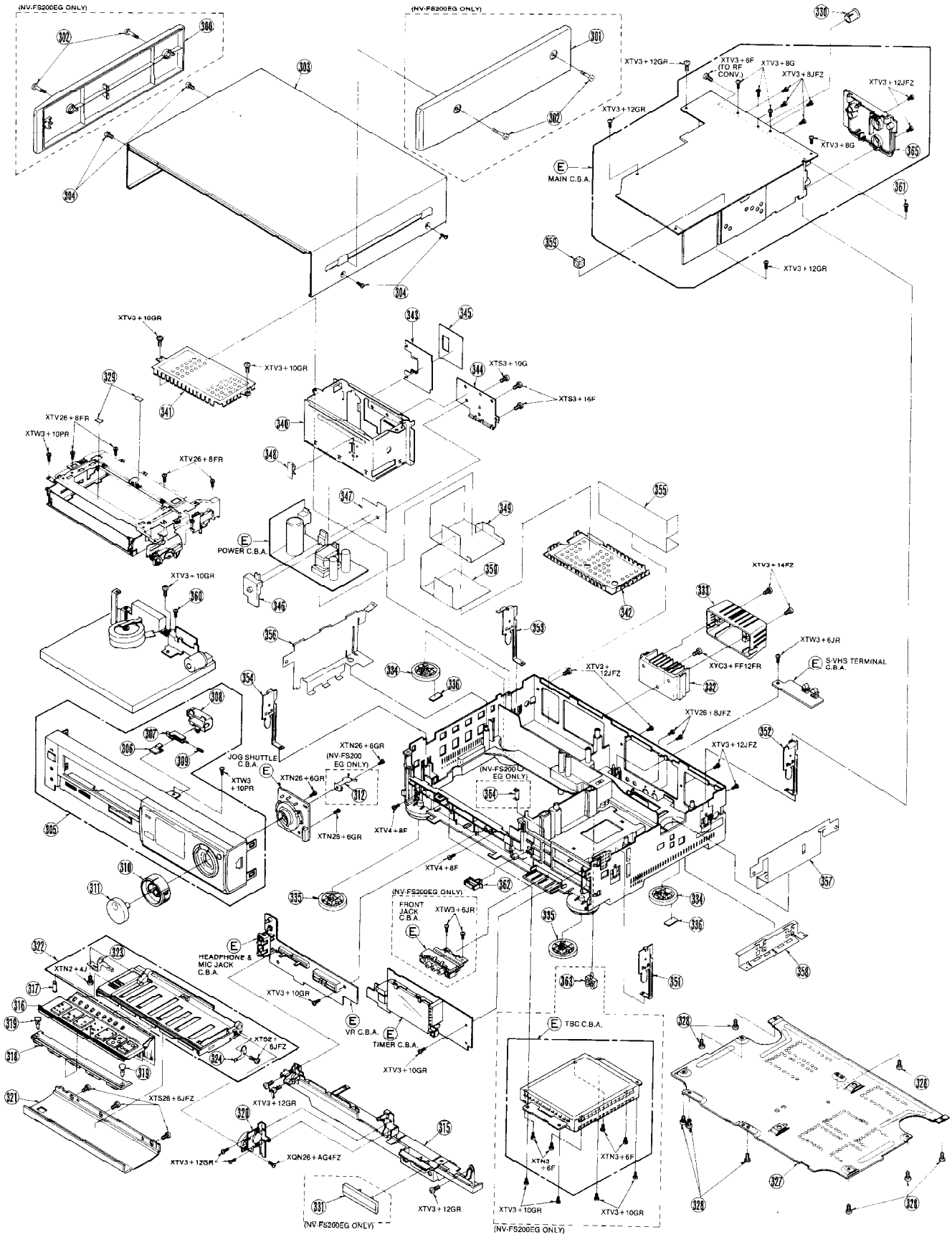
Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
201(3)		VMA7223	TOP PLATE	1	
202(3)		VXA3840	CASSETTE HOLDER UNIT	1	
217(3)		VMD1890	SIDE PLATE (L)	1	
218(3)		VML1880	OPENER LEVER	1	
219(3)		VXA4076	SIDE PLATE (R) UNIT	1	
221(3)		VXA4642	SLIDE SW UNIT	1	
229(3)		VXP0987	MAIN SHAFT UNIT	1	
230(3)		VMB1836	SUB WIPER SPRING (L)	1	
231(3)		VML1878	SUB WIPER ARM (L)	1	
232(3)		VML1879	SUB WIPER ARM (R)	1	
233(3)		VMB1837	SUB WIPER SPRING (R)	1	
234(3)		VMA6900	CASSETTE GUIDE	1	
235(3)		VKF1263	BLINDER PANEL	1	
236(3)		VMB1258	BLINDER SPRING	1	
240(3)		VMA7224	CASSETTE HOLDER ANGLE	1	

❸ CASSETTE UP MECHANISM SECTION



❺ PACKING PARTS SECTION



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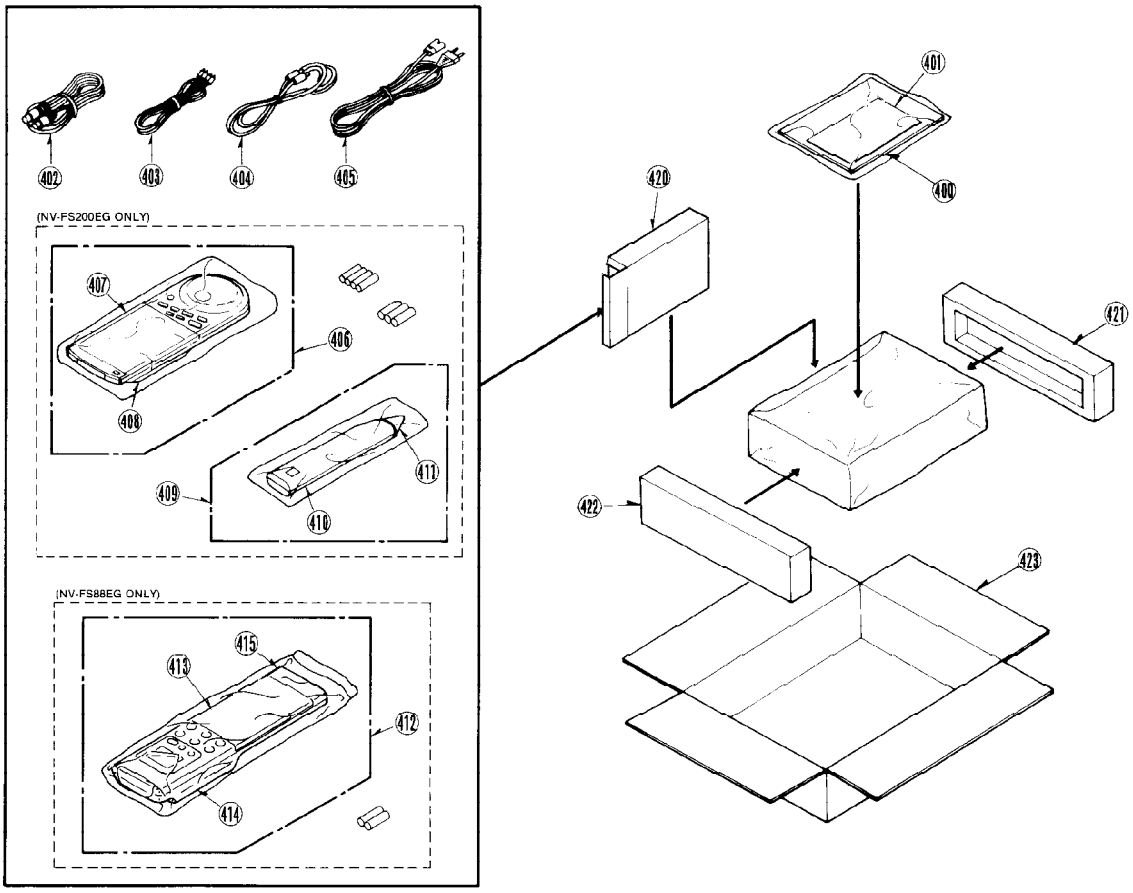
Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
300(4)		VYC0521	SIDE PANEL (L) UNIT	1	NV-FS200EG
301(4)		VGK2051	SIDE PANEL (R)	1	NV-FS200EG
302(4)		VHD0492	SIDE PANEL SCREW	4	NV-FS200EG
303(4)		VYP4010	TOP PANEL UNIT	1	NV-FS200EG
303(4)		VYP4009	TOP PANEL UNIT	1	NV-FS88EG
304(4)		VHD0165	TOP PANEL SCREW	4	
305(4)		VYP4004	FRONT PANEL (1) UNIT	1	NV-FS200EG
305(4)		VYP3998	FRONT PANEL (1) UNIT	1	NV-FS88EG
306(4)		VGU5246	DOOR OPEN BUTTON	1	
307(4)		VGU4498	DOOR LOCK LEVER	1	
308(4)		VGU4829	LOCK LEVER HOLDER	1	
309(4)		VMB1963	LOCK LEVER SPRING	1	
310(4)		VGU5425	SHUTTLE KNOB	1	NV-FS200EG
310(4)		VGU5846	SHUTTLE KNOB	1	NV-FS88EG
311(4)		VXU1027	JOG KNOB UNIT	1	NV-FS200EG
311(4)		VXU1088	JOG KNOB UNIT	1	NV-FS88EG
312(4)		VMC0729	JOG/SHUTTLE EARTH SPRING	1	NV-FS200EG
315(4)		VYF1828	SUPPORT PANEL UNIT	1	NV-FS200EG
315(4)		VYF1729	SUPPORT PANEL UNIT	1	NV-FS88EG
316(4)		VES0661	DOOR PANEL SW	1	NV-FS200EG
316(4)		VES0664	DOOR PANEL SW	1	NV-FS88EG
317(4)		VGL0466	PANEL LIGHT	1	
318(4)		VKF1852	DOOR SUPPORT PANEL	1	
319(4)		VMG0657	DOOR CUSHION RUBBER	2	
320(4)		VXU1101	DOOR GEAR UNIT	1	
321(4)		VYC0526	DOOR ALUMINUM UNIT	1	NV-FS200EG
321(4)		VYC0519	DOOR ALUMINUM UNIT	1	NV-FS88EG
322(4)		VYP4016	DOOR PANEL UNIT	1	
323(4)		VMC0522	DOOR EARTH SPRING	1	
324(4)		VMP2314	DOOR PANEL ANGLE	1	
327(4)		VKU0357	BOTTOM PLATE	1	
328(4)		VHD0059	BOTTOM PLATE SCREW	9	
329(4)		VMT0332	TOP PANEL SPACER	2	
330(4)		VGQ1421	EDIT 5P CAP	1	
331(4)		VKF1314	FRONT JACK COVER	1	NV-FS200EG
332(4)		VSC2623	HEAT SINK (O)	1	
333(4)		VKF1150	HEAT SINK COVER	1	
334(4)		VKA0130	LEG (R)	2	
335(4)		VKA0141	LEG (F)	2	
336(4)		VKA0122	FOOT	2	
340(4)		VXA3838	POWER SHIELD PLATE(MAIN) U.	1	
341(4)		VSC2621	POWER SHIELD PLATE (TOP)	1	
342(4)		VSC2622	POWER SHIELD PLATE (BOTTOM)	1	
343(4)		VMP2337	INLET ANGLE	1	
344(4)		VSC2960	HEAT SINK (P)	1	
345(4)		VGH1476	POWER NAME PLATE	1	
346(4)		VGQ1615	IC HOLDER	1	
347(4)		VMZ1455	INSULATION SHEET	1	
348(4)		VMC0357	TR. HOLDER SPRING	1	
349(4)		VMZ1454	BARRIER (A)	1	
350(4)		VMZ1465	BARRIER (B)	1	
351(4)		VMP2334	TOP HOLDER ANGLE (FRONT-R)	1	
352(4)		VMP2335	TOP HOLDER ANGLE (REAR-R)	1	
353(4)		VMP2336	TOP HOLDER ANGLE (REAR-L)	1	
354(4)		VMP2511	TOP HOLDER ANGLE (FRONT-L)	1	
355(4)		VMZ1544	POWER BARRIER	1	
356(4)		VSC3617	FTZ EARTH PLATE (L)	1	
357(4)		VSC3680	FTZ EARTH PLATE (R1)	1	
358(4)		VSC3681	FTZ EARTH PLATE (R2)	1	
359(4)		VGQ0543	MAIN CUSHION	1	
360(4)		VHD0168	CHASSIS SCREW	1	
361(4)		VHD0418	MAIN SCREW	1	
362(4)		VJF0102	WIRE SADDLE	1	
363(4)		VJF0047	WIRE CLAMPER	1	NV-FS200EG
364(4)		VMC0523	FRONT JACK EARTH PLATE	1	NV-FS200EG
365(4)		VJH0650	RF ANT TERMINAL PLATE	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks

❹ CASING PARTS SECTION



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Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
400(5)		VQT4597	OPERATING INSTRUCTIONS	1	<!> NV-FS200EG
			(ENGLISH/GERMAN)		
400(5)		VQT4598	OPERATING INSTRUCTIONS	1	<!> NV-FS200EG
			(FRENCH/DUTCH)		
400(5)		VQT4599	OPERATING INSTRUCTIONS	1	<!> NV-FS200EG
			(ITALIAN/ARABIC)		
400(5)		VQT4603	OPERATING INSTRUCTIONS	1	<!> NV-FS88EG
			(ENGLISH/GERMAN)		
400(5)		VQT4604	OPERATING INSTRUCTIONS	1	<!> NV-FS88EG
			(FRENCH/DUTCH)		
400(5)		VQT4605	OPERATING INSTRUCTIONS	1	<!> NV-FS88EG
			(ITALIAN)		
401(5)		VQC1859	PROGRAMME SHEET	1	
402(5)		VJA0710	DIN RF CABLE	1	
403(5)		VJA0231	AUDIO CABLE	1	
404(5)		VJA0658	S-VIDEO 4P CABLE	1	
405(5)		VJA0664	AC CORD	1	<!>
406(5)		VEQ1392	JOG REMOTE CONTROLLER	1	NV-FS200EG
407(5)		VGP2891	DOOR PANEL (VEQ1392)	1	NV-FS200EG
408(5)		VKF1714	BATTERY COVER (VEQ1392)	1	NV-FS200EG
409(5)		VEQ1325	DIGITAL SCANNER	1	NV-FS200EG
410(5)		VKF1024	BATTERY COVER (VEQ1325)	1	NV-FS200EG
411(5)		VKM1332	SENSOR CAP (VEQ1325)	1	NV-FS200EG
412(5)		VEQ1389	REMOTE CONTROLLER	1	NV-FS88EG
			(BUILD IN DIGITAL SCANNER)		
413(5)		VGP2797	DOOR PANEL (VEQ1389)	1	NV-FS88EG

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
414(5)		VKF1658	BATTERY COVER (VEQ1389)	1	NV-FS88EG
415(5)		VGQ2399	SENSOR CAP (VEQ1389)	1	NV-FS88EG
420(5)		VPK0834	ACCESSORIES PACKING	1	NV-FS200EG
420(5)		VPK0825	ACCESSORIES PACKING	1	NV-FS88EG
421(5)		VPN3402	CUSHION (R)	1	
422(5)		VPN3403	CUSHION (L)	1	
423(5)		VPG6390	PACKING	1	NV-FS200EG
423(5)		VPG6392	PACKING	1	NV-FS88EG
			SERVICING FIXTURES & TOOLS		
		VFJ8125H3F	VHS ALIGNMENT TAPE(PAL)	1	
		VFK0335	RETAINING RING REMOVER	1	
			(3mm/4mm)		
		VFK0387	TENSION POST ADJUSTMENT	1	
			PLATE		
		VFK0191	POST ADJUSTMENT PLATE	1	
		VFK0190	REEL TABLE HEIGHIT GAUGE	1	
		VFK0328	H-POSITION ADJUSIMENT	1	
			SCREWDRIVER		
		VFK0329	POST ADJUSTMENT SCREWDRIVER	1	
		VFK62	FAN TYPE TENSION GAUGE	1	
		VFK0326	HEX WRENCH SET	1	
		VFK0132	BACK TENSION METER	1	
		VFK0343	CHECK LIGHT	1	
		VFK0344	HEIGHIT ADJUSIMENT FIXTURE	1	
		VFK27	HEAD CLEANING STICK	1	
		MOR265	MORLYTONE GREASE	1	
		VFK0341	UPPER CYLINDER REMOVER	1	
		VFK0582	8 PIN EXTENSION CABLE	1	
		VFK0583	9 PIN EXTENSION CABLE	1	
		VFK0584	11 PIN EXTENSION CABLE	1	
		VFK0585	12 PIN EXTENSION CABLE	1	
		VFK0586	15 PIN EXTENSION CABLE	1	

5-2. ELECTRICAL REPLACEMENT PARTS LIST

Note:1.* Be sure to make your orders of replacement parts according to this list.
2.IMPORTANT SAFETY NOTICE
components identified with the mark <!> have the special characteristics for safety. When replacing any of these components,use only the same type.
3.Unless otherwise specified,
All resistors are in OHMS ,K=1,000 OHMS. All capacitors are in MICRO-FARADS(uf),P=uuF.
4.The P.C.Board units marked width'■'show below the main assembled parts.
5.Printed circuit board assembly with mark(NLA) is no longer available after discontinuation of the product.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		VEPO6777A	MAIN C.B.A.	1	(NLA)NV-FS200EG
					INCLUDING THE SERVO
					PACK C.B.A.
					(VEPO2389A),
					INPUT/OUTPUT PACK
					C.B.A.(VEPO3892A),
					LUMINANCE &
					CHROMINANCE PACK
					C.B.A.(VEPO3894A),
					SUB LUMINANCE &
					CHROMINANCE PACK
					C.B.A.(VEPO3895A),
					AUDIO PACK C.B.A.
					(VEPO4361E),
					VPS PACK C.B.A.
					(VEPO7575A),
					TV DEMODULATOR PACK
					C.B.A.(VEPO7643E),
					DECODER PACK C.B.A.
					(VEPO7671A).
		VEPO2389A	SERVO PACK C.B.A.	1	(NLA)NV-FS200EG
					INCLUDED IN MAIN
					C.B.A.(VEPO6777A).
		VEPO3892A	INPUT/OUTPUT PACK C.B.A.	1	(NLA)NV-FS200EG
					INCLUDED IN MAIN
					C.B.A.(VEPO6777A).
		VEPO3894A	LUMINANCE & CHROMINANCE	1	(NLA)NV-FS200EG
			PACK C.B.A.		INCLUDED IN MAIN
					C.B.A.(VEPO6777A).
		VEPO3895A	SUB LUMINANCE & CHROMINANCE	1	(NLA)NV-FS200EG
			PACK C.B.A.		INCLUDED IN MAIN
					C.B.A.(VEPO6777A),
					INCLUDING THE 1H
					DELAY CCD UNIT
					(VEPO3680B).
		VEPO3680B	1H DELAY CCD UNIT	1	(NLA)NV-FS200EG
					INCLUDED IN SUB
					LUMINANCE &
					CHROMINANCE PACK
					C.B.A.(VEPO3895A).
		VEPO4361E	AUDIO PACK C.B.A.	1	(NLA)NV-FS200EG
					INCLUDED IN MAIN
					C.B.A.(VEPO6777A).
		VEPO7575A	VPS PACK C.B.A.	1	(NLA)NV-FS200EG
					INCLUDED IN MAIN
					C.B.A.(VEPO6777A).
		VEPO7643E	TV DEMODULATOR PACK C.B.A.	1	(NLA)NV-FS200EG
					INCLUDED IN MAIN
					C.B.A.(VEPO6777A).
		VEPO7671A	DECODER PACK C.B.A.	1	(NLA)NV-FS200EG
					INCLUDED IN MAIN
					C.B.A.(VEPO6777A).
		VEPO6777C	MAIN C.B.A.	1	(NLA)NV-FS88EG

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
					INCLUDING THE SERVO
					PACK C.B.A.
					(VEPO2389A),
					INPUT/OUTPUT PACK
					C.B.A.(VEPO3892B),
					LUMINANCE &
					CHROMINANCE PACK
					C.B.A.(VEPO3894A),
					SUB LUMINANCE &
					CHROMINANCE PACK
					C.B.A.(VEPO3895B),
					AUDIO PACK C.B.A.
					(VEPO4361E),
					VPS PACK C.B.A.
					(VEPO7575A),
					TV DEMODULATOR PACK
					C.B.A.(VEPO7643E),
					DECODER PACK C.B.A.
					(VEPO7671A).
		VEPO2389A	SERVO PACK C.B.A.	1	(NLA)NV-FS88EG
					INCLUDED IN MAIN
					C.B.A.(VEPO6777C).
		VEPO3892B	INPUT/OUTPUT PACK C.B.A.	1	(NLA)NV-FS88EG
					INCLUDED IN MAIN
					C.B.A.(VEPO6777C).
		VEPO3894A	LUMINANCE & CHROMINANCE	1	(NLA)NV-FS88EG
			PACK C.B.A.		INCLUDED IN MAIN
					C.B.A.(VEPO6777C).
		VEPO3895B	SUB LUMINANCE & CHROMINANCE	1	(NLA)NV-FS88EG
			PACK C.B.A.		INCLUDED IN MAIN
					C.B.A.(VEPO6777C).
		VEPO4361E	AUDIO PACK C.B.A.	1	(NLA)NV-FS88EG
					INCLUDED IN MAIN
					C.B.A.(VEPO6777C).
		VEPO7575A	VPS PACK C.B.A.	1	(NLA)NV-FS88EG
					INCLUDED IN MAIN
					C.B.A.(VEPO6777C).
		VEPO7643E	TV DEMODULATOR PACK C.B.A.	1	(NLA)NV-FS88EG
					INCLUDED IN MAIN
					C.B.A.(VEPO6777C).
		VEPO7671A	DECODER PACK C.B.A.	1	(NLA)NV-FS88EG
					INCLUDED IN MAIN
					C.B.A.(VEPO6777C).
		VEPO5170F	HEAD AMP C.B.A.	1	(NLA)
		VEPO6779A	VR C.B.A.	1	(NLA)
					INCLUDING THE HEAD
					PHONE C.B.A.
					(VPO0S65A).
		VEPO0S65A	HEAD PHONE C.B.A.	1	(NLA)
					INCLUDED IN VR
					C.B.A.(VEPO6779A).
		VEPO7664A	TIMER C.B.A.	1	(NLA)<!>NV-FS200EG
		VEPO7664C	TIMER C.B.A.	1	(NLA)<!>NV-FS88EG
		VEPO6778A	JOG C.B.A.	1	(NLA)
		VEPO1381J	POWER C.B.A.	1	(NLA)<!>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		VEP00S21A	S TERMINAL C.B.A.	1	(NLA)
		VEP00P23B	CYLINDER DRIVE C.B.A.	1	(NLA)
		VEP03893A	TBC C.B.A.	1	(NLA)NV-FS200EG
		VEP04359A	FRONT INPUT C.B.A.	1	(NLA)NV-FS200EG
		VEP00K88C	FE HEAD C.B.A.	1	(NLA)
		VEP00P61A	REV MOTOR CONNECTION C.B.A.	1	(NLA)
		VXA38Z5	MECHANISM CONNECTION C.B.A.	1	(NLA)
		VEK3578	PHOTO Tr. (S) C.B.A.	1	(NLA)
		-------	PHOTO Tr. (T) C.B.A.	1	(NLA)
					INCLUDED IN SLIDE
					SW UNIT (VXA4642).
		ENC17984	RF CONVERTER	1	<!>
		ENV57884H6	TUNER	1	<!>
F1101,02		XBA2C16TB0	FUSE	2	<!>
	■	VEP06777A	MAIN C.B.A.		(NLA)NV-FS200EG
			CONNECTORS		
BP1004		VJF0094	CONNECTOR	1	
			CAPACITORS		
C303		ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C305		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C306		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C307		ECUM1H050CCN	C.CAPACITOR CH 50V 5P	1	
C308		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C309		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C310		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C311		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C312		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C319		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C320		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C321		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C322		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C323		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C324		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C325		ECEA1HK4R7	E.CAPACITOR 50V 4.7U	1	
C326		ECQV1H334JZ	P.CAPACITOR 50V 0.33U	1	
C327-30		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C331,32		ECEA1CK100	E.CAPACITOR 16V 10U	2	
C333		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C334-36		ECEA1CK100	E.CAPACITOR 16V 10U	3	
C337		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C338		ECUM1H104ZFN	C.CAPACITOR 50V	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C339		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C340		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C341		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C343		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C344		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C345		ECUM1H562KBN	C.CAPACITOR CH 50V 5600P	1	
C346		ECCF1H470JC4	C.CAPACITOR 50V 47P	1	
C701		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C702		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C703		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C707		ECEA1HK0R1	E.CAPACITOR 50V 0.1U	1	
C708		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C710		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C717-20		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C721		ECEA1HKR27K	E.CAPACITOR 50V 0.27U	1	
C722		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C723		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C725		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C727		ECUM1H080DCN	C.CAPACITOR CH 50V 80P	1	
C728		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C730		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C731		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C734		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C739		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C740		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C741		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C742		ECUM1H030CCN	C.CAPACITOR CH 50V 3P	1	
C743		ECUM1H270RSN	C.CAPACITOR CH 50V 27P	1	
C744		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C745		ECUM1H680JPN	C.CAPACITOR CH 50V 68P	1	
C746		ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C748		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C781		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C782		ECUM1H060DCN	C.CAPACITOR CH 50V 6P	1	
C790		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C806		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C807		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C808		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C809		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C810		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C811		ECEA1HK4R7	E.CAPACITOR 50V 4.7U	1	
C812		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C813		ECQV1H823JZ	P.CAPACITOR 50V 0.082U	1	
C814-16		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	3	
C817		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C818		ECQV1H224JZ	P.CAPACITOR 50V 0.22U	1	
C819		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C820		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C821		ECUM1H060DCN	C.CAPACITOR CH 50V 6P	1	
C822		ECRHA020D41	TRIMMER	1	
C823		ECQV1H154JZ	P.CAPACITOR 50V 0.15U	1	
C824		ECUM1H471KBN	C.CAPACITOR CH 50V 470P	1	
C825		ECUM1H681KBN	C.CAPACITOR CH 50V 680P	1	
C826		ECUM1H020JCN	C.CAPACITOR CH 50V 02P	1	
C827		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C828		ECEA1HK3R3	E.CAPACITOR 50V 3.3U	1	
C829-31		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C832,33		ECUM1H104ZFN	C.CAPACITOR 50V	2	
C834		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C835		ECUM1H390JCN	C.CAPACITOR CH 50V 39P	1	
C836		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C837		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C838,39		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C840		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C841		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C842		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C843		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C844		ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	1	
C845		ECQB1H332JH	P.CAPACITOR 50V 0.27U	1	
C846		ECUM1C105ZFN	C.CAPACITOR 16V 1U	1	
C847		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C848		ECUM1H821KBN	C.CAPACITOR CH 50V 820P	1	
C849		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C850,51		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C852		ECUM1H120JCN	C.CAPACITOR CH 50V 12P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C1003	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1004	ECEA1CK101	E.CAPACITOR 16V 100U	1	
C1009	ECEA1AK330	E.CAPACITOR 10V 33U	1	
C1010	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C1701	ECKD2H471KB	E.CAPACITOR 500V 470P	1	
C1702	ECA1CM101	E.CAPACITOR 16V 100U	1	
C1703	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1704	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C1705	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C1706	ECA1VM100	E.CAPACITOR 35V 10U	1	
C1707	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1708	ECA1CM221	E.CAPACITOR 16V 220U	1	
C2001	ECEA1HK4R7	E.CAPACITOR 50V 4.7U	1	
C2002	ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C2003	ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	1	
C2004	ECEA1HK3R3	E.CAPACITOR 50V 3.3U	1	
C2005	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C2006	ECUM1H471KBN	C.CAPACITOR CH 50V 470P	1	
C2007	ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C2008	ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C2009	VCYE1C104MR1	S.CAPACITOR 16V 0.1U	1	
C2010	ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C2011,12	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	2	
C2013,14	ECEA1HKN3R3	E.CAPACITOR 50V 3.3U	2	
C2015	ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C2016	ECQB1H472JH	P.CAPACITOR 50V 4700P	1	
C2017	ECQV1H184JZ	P.CAPACITOR 50V 0.18U	1	
C2019	ECQV1H683JZ	P.CAPACITOR 50V 0.068U	1	
C2020	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2021	ECEA1AK470	E.CAPACITOR 10V 47U	1	
C2022	ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C2023,24	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	2	
C2025	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C2026	ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C2027	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C2028	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C2029	ECQB1H392JH	P.CAPACITOR 50V 3900P	1	
C2501	ECEA1CK101	E.CAPACITOR 16V 100U	1	
C2502	ECA0JM221	E.CAPACITOR 6.3V 220U	1	
C2503,04	ECQV1H333JZ	P.CAPACITOR 50V 0.033U	2	
C2505	ECEA1CU470	E.CAPACITOR 16V 47U	1	
C2506-09	ECQV1H333JZ	P.CAPACITOR 50V 0.033U	4	
C2510-12	ECEA1HK2R2	E.CAPACITOR 50V 2.2U	3	
C2513,14	ECUM1C105ZFN	C.CAPACITOR 16V 1U	2	
C2515	ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C2516	ECEA1HK4R7	E.CAPACITOR 50V 4.7U	1	
C2517	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C2518	ECEA1HKNR47	E.CAPACITOR 50V 0.47U	1	
C2519	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C2520	ECEA1HKNR47	E.CAPACITOR 50V 0.47U	1	
C2521	ECA1EM470	E.CAPACITOR 25V	1	
C2522	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C2524,25	ECA1CM221	E.CAPACITOR 16V 220U	2	
C2526	ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C2527	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C2528	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C2529	ECUM1E224ZFM	C.CAPACITOR CH 25V 0.22U	1	
C2530	ECUM1E223KBN	C.CAPACITOR CH 25V 0.023U	1	
C2531	VCYE1C104MR1	S.CAPACITOR 16V 0.1U	1	
C3001	ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3002	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C3003-05	ECEA1CK100	E.CAPACITOR 16V 10U	3	
C3006-08	ECUM1H104ZFN	C.CAPACITOR 50V	3	
C3009	ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C3010	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C3011	ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3012,13	ECUM1H104ZFN	C.CAPACITOR 50V	2	
C3014,15	ECEA0JK470	E.CAPACITOR 6.3V 47U	2	
C3016	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3017,18	ECEA1CK100	E.CAPACITOR 16V 10U	2	
C3019,20	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3021,22	ECEA1CK100	E.CAPACITOR 16V 10U	2	
C3023	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C3024	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C3025	ECEA1HK010	E.CAPACITOR 50V 1U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C3026	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3027,28	ECEA1HK010	E.CAPACITOR 50V 1U	2	
C3029	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3033	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C3034	ECA0JM331	E.CAPACITOR 6.3V 330U	1	
C3035	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C3036	ECA0JM331	E.CAPACITOR 6.3V 330U	1	
C3037	ECEA1HK010	E.CAPACITOR 50V 1U	1	
C3038	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3039	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C3040	ECA0JM221	E.CAPACITOR 6.3V 220U	1	
C3041	ECEA1AKN470	E.CAPACITOR 10V 47U	1	
C3042	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C3043	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C3044	ECUM1H561KBN	C.CAPACITOR CH 50V 560P	1	
C3301	ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C3302	ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C3304-08	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	5	
C3309	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C3310	ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3313,14	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3315	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C3316	ECUM1H271JCN	C.CAPACITOR CH 50V 270P	1	
C3321	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C3322	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3323	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3324	ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C3325	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3326	ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C3327,28	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3329	ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3330	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C3331	ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3332	ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C3333	ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C3334	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3335	ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C3336	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C3337	ECUM1H060DCN	C.CAPACITOR CH 50V 6P	1	
C3338	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3339	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3340	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C3341	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3342	ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3343	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3344	ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C3345	ECUM1H391KBN	C.CAPACITOR CH 50V 390P	1	
C3346	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3347	ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C3349	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C3350	ECUM1H681KBN	C.CAPACITOR CH 50V 680P	1	
C3351,52	ECUM1H181JCN	C.CAPACITOR CH 50V 180P	2	
C3353	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3354	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3355	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3356	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3357	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3358	ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C3359	ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C3360	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C3364	ECEA0JKN470	E.CAPACITOR 6.3V 47U	1	
C3365	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C3366	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C3371	ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C3372	ECEA1EK3R3	E.CAPACITOR 25V 3.3U	1	
C3382	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3501	ECEA1HKS010	E.CAPACITOR 50V 1U	1	
C3502	ECEA1CKS470	E.CAPACITOR 16V 47U	1	
C3503	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3504	ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C3505	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3506	ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C3507	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3508	ECEA1HKSR22	E.CAPACITOR 50V 0.22U	1	
C3509	ECEA1EKS3R3	E.CAPACITOR 25V 3.3U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C3510	ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C3511	ECEA0JSN470	E.CAPACITOR 6.3V 47U	1	
C3512	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C3514	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3515	ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C3516	ECEA1EKS3R3	E.CAPACITOR 25V 3.3U	1	
C3517,18	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	2	
C3519	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C3520,21	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3801	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C3802	ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C3804	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3805,06	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3807	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3808,09	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3810	ECEA1HK3R3	E.CAPACITOR 50V 3.3U	1	
C3811,12	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3813	ECUM1H471KBN	C.CAPACITOR CH 50V 470P	1	
C3814	ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C3815	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3819	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3901,02	ECEA0JK101	E.CAPACITOR 6.3V 100U	2	
C3903	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3904	ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3905	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C3906	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C3907	ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C3908,09	ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	2	
C3910	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3911,12	ECEA0JK101	E.CAPACITOR 6.3V 100U	2	
C3913	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C3914	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C3923-25	ECEA0JK101	E.CAPACITOR 6.3V 100U	3	
C4001	ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C4002,03	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C4005	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4006	ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C4007	ECEA16M33	E.CAPACITOR 16V 33U	1	
C4008	ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C4009	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4010	ECQP1222JZ	P.CAPACITOR 0.0022U	1	
C4011	ECCD2H181J	C.CAPACITOR 500V 180P	1	
C4013	ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C4014,15	ECEA1CK100	E.CAPACITOR 16V 10U	2	
C4016	ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C4017	ECUM1H471KBN	C.CAPACITOR CH 50V 470P	1	
C4018	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4019	ECUM1H222JUN	C.CAPACITOR CH 50V 2200P	1	
C4020,21	ECUM1H224ZFM	C.CAPACITOR CH 50V 0.22U	2	
C4023	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C4024	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C4501	ECQB1H152JH	P.CAPACITOR 50V 1500P	1	
C4502	ECUM1C104ZFN	C.CAPACITOR CH 16V 0.1U	1	
C4503	ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4504,05	ECEA1CP247O	E.CAPACITOR 16V 47U	2	
C4506	VCEA1CAH100	E.CAPACITOR 16V 10U	1	
C4507	ECQB1H223JA	P.CAPACITOR 50V 0.022U	1	
C4508	ECEA1EBZ4R7	E.CAPACITOR 25V 4.7U	1	
C4509	ECEA1AP247O	E.CAPACITOR 10V 47U	1	
C4510	ECQB1H103JA	P.CAPACITOR 50V 0.01U	1	
C4511	ECQB1H332JA	P.CAPACITOR 50V 3300P	1	
C4512	ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4513	ECUM1H681JN	C.CAPACITOR CH 50V 680P	1	
C4514	ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4515	VCEA1EAH4R7	E.CAPACITOR 25V 4.7U	1	
C4517	ECEA1AP2101	E.CAPACITOR 10V 100U	1	
C4518	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C4521	ECUM1C473KBV	C.CAPACITOR CH 16V 0.047U	1	
C4522	VCEA1HAH3R3	E.CAPACITOR 50V 3.3U	1	
C4528	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C4530	ECEA0JPK470	E.CAPACITOR 6.3V 47U	1	
C4533	ECEA1CP2330	E.CAPACITOR 16V 33U	1	
C4537	ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C4538	ECEA1HUR47	E.CAPACITOR 50V 0.47U	1	
C4539	ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C4541	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C4545	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4552	ECUM1C104ZFN	C.CAPACITOR CH 16V 0.1U	1	
C4556	VCEA1CAH100	E.CAPACITOR 16V 10U	1	
C4557	ECQB1H223JA	P.CAPACITOR 50V 0.022U	1	
C4558	ECEA1EBZ4R7	E.CAPACITOR 25V 4.7U	1	
C4559	ECEA1APZ470	E.CAPACITOR 10V 47U	1	
C4560	ECQB1H103JA	P.CAPACITOR 50V 0.01U	1	
C4561	ECQB1H332JA	P.CAPACITOR 50V 3300P	1	
C4562	ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4563	ECUM1H681JN	C.CAPACITOR CH 50V 680P	1	
C4564	ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4565	VCEA1EAH4R7	E.CAPACITOR 25V 4.7U	1	
C4567	ECEA1APZ101	E.CAPACITOR 10V 100U	1	
C4568	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C4572	VCEA1HAH3R3	E.CAPACITOR 50V 3.3U	1	
C4576	ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C4583	ECEA1CPZ330	E.CAPACITOR 16V 33U	1	
C4585,86	ECEA1APZ101	E.CAPACITOR 10V 100U	2	
C4591	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C4592	ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4604	ECUM1H182JN	C.CAPACITOR CH 50V 1800P	1	
C4606	VCEA0JAC470	E.CAPACITOR 6.3V 47U	1	
C4611	ECQB1H182JZ	F.CAPACITOR 50V 1800P	1	
C4613	ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
C4616	ECUX1H102ZFV	C.CAPACITOR CH 50V 1000P	1	
C4617	ECEA1OM22	E.CAPACITOR 10V 22U	1	
C4618	ECQB1H822JH	P.CAPACITOR 50V 8200P	1	
C4619	ECEA1APB100	E.CAPACITOR 10V 10U	1	
C4621	ECEA0JPK101	E.CAPACITOR 6.3V 100U	1	
C4629	ECQB1H562JZ	P.CAPACITOR 50V 5600P	1	
C4636	ECUM1H471JN	C.CAPACITOR CH 50V 470P	1	
C4638	ECQB1H822JH	P.CAPACITOR 50V 8200P	1	
C4651	ECQB1H333JA	P.CAPACITOR 50V 0.033U	1	
C4652,53	ECUM1C105ZFN	C.CAPACITOR 16V 1U	2	
C4901-04	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	4	
C4908-10	VCEA1CAD100	E.CAPACITOR 16V 10U	3	
C4912	VCEA0JAC101	E.CAPACITOR 6.3V 100U	1	
C4913	ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C4914	ECQB1H332JH	P.CAPACITOR 50V 0.27U	1	
C4915	ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C4916	ECQB1H332JH	P.CAPACITOR 50V 0.27U	1	
C4917	VCEA1CAD100	E.CAPACITOR 16V 10U	1	
C4918	ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C4919	ECQB1H332JH	P.CAPACITOR 50V 0.27U	1	
C4920	ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C4921	ECQB1H332JH	P.CAPACITOR 50V 0.27U	1	
C4922	ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C4923,24	ECQB1H332JH	P.CAPACITOR 50V 0.27U	2	
C4925	ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C4926	VCEA0JAC101	E.CAPACITOR 6.3V 100U	1	
C4927,28	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	2	
C6001	ECEA0JK330	E.CAPACITOR 6.3V 33U	1	
C6002	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6003,04	ECEA0JK470	E.CAPACITOR 6.3V 47U	2	
C6005	ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C6006	ECQB1H392JH	P.CAPACITOR 50V 3900P	1	
C6007	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C6009,10	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	2	
C6014	ECA0JM331	E.CAPACITOR 6.3V 330U	1	
C6015	ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C6016	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6017	ECA1CM222	E.CAPACITOR 16V 2200U	1	
C6018	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C6019	ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C6020,21	ECUM1H104ZFN	C.CAPACITOR 50V	2	
C6022,23	ECUM1H271JCN	C.CAPACITOR CH 50V 270P	2	
C6024	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C6025	ECEA1HKZR2	E.CAPACITOR 50V 2.2U	1	
C6101	ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C6102	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C6103	ECA0JM221	E.CAPACITOR 6.3V 220U	1	
C6302	EECS5R5V105	TRIMMER	1	
C7302	ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C7303	ECQV1H393JZ	P.CAPACITOR 50V 0.039U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C7304	ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C7305	ECQV1H473JZ	P.CAPACITOR 50V 0.047U	1	
C7306	ECQB1H102KZ	P.CAPACITOR 50V 1000P	1	
C7307	ECQB1H822KZ	P.CAPACITOR 50V 8200P	1	
C7308	ECQB1H102KZ	P.CAPACITOR 50V 1000P	1	
C7309	ECQB1H152JH	P.CAPACITOR 50V 1500P	1	
C7310	ECEA16M10	E.CAPACITOR 16V	1	
C7311	ECFA50MR47	E.CAPACITOR	1	
C7312	ECQV1H224JZ	P.CAPACITOR 50V 0.22U	1	
C7313	ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C7314	ECQV1H224JZ	P.CAPACITOR 50V 0.22U	1	
C7315	ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C7316	ECQV1H224JZ	P.CAPACITOR 50V 0.22U	1	
C7317	ECEA1CK101	E.CAPACITOR 16V 100U	1	
C7318	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7319	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7320,21	ECEA1CK100	E.CAPACITOR 16V 10U	2	
C7323,24	ECQV1H393JZ	P.CAPACITOR 50V 0.039U	2	
C7331	ECQV1H474JZ	P.CAPACITOR 50V 0.47U	1	
C7332,33	ECUM1H102ZFN	C.CAPACITOR CH 50V 1000P	2	
C7334	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7335	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7336	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7337	ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C7339	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7340	ECUM1H390JPN	C.CAPACITOR CH 50V 39P	1	
C7341	ECUM1H070DCN	C.CAPACITOR CH 50V 7P	1	
C7342	ECQV1H823JZ	P.CAPACITOR 50V 0.082U	1	
C7343	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7345	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7346	ECUM1H390JPN	C.CAPACITOR CH 50V 39P	1	
C7347	ECUM1H070DCN	C.CAPACITOR CH 50V 7P	1	
C7348	ECQV1H393JZ	P.CAPACITOR 50V 0.039U	1	
C7349,50	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	2	
C7351,52	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7353	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7401	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7402,03	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7404	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7405,06	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7407	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C7408	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7409	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C7651	ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C7653	ECQB1H332JH	P.CAPACITOR 50V 0.27U	1	
C7668	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7685	ECEA1HK010	E.CAPACITOR 50V 1U	1	
C7801	ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C7815	VCYE1C104MR1	S.CAPACITOR 16V 0.1U	1	
C7816	ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C7821	ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C7822	ECQB1H333JH	P.CAPACITOR 50V 0.033U	1	
C7823	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C7851	ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C7852	ECEA1CK101	E.CAPACITOR 16V 100U	1	
C7853,54	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	2	
C7855,56	ECEA1HK010	E.CAPACITOR 50V 1U	2	
C7860	ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
		DIODES		
D301	MA723VT	DIODE	1	(VT)
D302	MA4091M	DIODE	1	
D303	1SS254	DIODE	1	
D304	MA151K	DIODE	1	
D710	MA3100L	DIODE	1	
D801	1SS254	DIODE	1	
D802	MA151WK	DIODE	1	
D803	MA151WK	DIODE	1	
D805	1SS254	DIODE	1	
D806	MA723VT	DIODE	1	(VT)
D807	1SS254	DIODE	1	
D808	MA151WA	DIODE	1	
D811-14	1SS254	DIODE	4	
D1005,06	1SS254	DIODE	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
D1701	SB05-05CP	DIODE	1	
D1702	MA4300H	DIODE	1	
D1703	MA185	DIODE	1	
D2002	1SS254	DIODE	1	
D2501	1SS254	DIODE	1	
D2503-10	1SS254	DIODE	8	
D2511	AK04	DIODE	1	
D2512	MA723VT	DIODE	1	(VT)
D2515	1SS254	DIODE	1	
D3001,02	MA723VT	DIODE	2	(VT)
D3004,05	1SS254	DIODE	2	
D3006	MA723VT	DIODE	1	(VT)
D3007	1SS254	DIODE	1	
D3009,10	1SS254	DIODE	2	
D3011	MA723VT	DIODE	1	(VT)
D3012	1SS254	DIODE	1	
D3301,02	1SS254	DIODE	2	
D3304	MA723VT	DIODE	1	(VT)
D3306	1SS254	DIODE	1	
D3901	MA4056M	DIODE	1	
D3902-04	1SS254	DIODE	3	
D4005	1SS254	DIODE	1	
D4501,02	MA151K	DIODE	2	
D4503	MA151K	DIODE	1	
D4504	MA151K	DIODE	1	
D4601,02	MA151K	DIODE	2	
D6001	MA723VT	DIODE	1	(VT)
D6002	AK04	DIODE	1	
D6003,04	MA723VT	DIODE	2	(VT)
D6005,06	1SS254	DIODE	2	
D6007	ERA15-01	DIODE	1	
D6008	AK04	DIODE	1	
D6009-15	1SS254	DIODE	7	
D6101,02	MA156	DIODE	2	
D6105	AK04	DIODE	1	
D6106-09	1SS254	DIODE	4	
D7303	MA28WA	DIODE	1	
D7304	MA3100L	DIODE	1	
D7401	MA723VT	DIODE	1	(VT)
D7403-06	1SS254	DIODE	4	
D7408	MA29W-A	DIODE	1	
D7672,73	MA3150-H	DIODE	2	
D7851	1SS254	DIODE	1	
		DELAY LINES		
DL801	VLD0147	DELAY LINE	1	
DL802	EFDVR645A45A	DELAY LINE	1	
DL3801	EFDUN124A13N	DELAY	1	
		CONNECTORS		
PG	VJS1231R	CONNECTOR (FEMALE)	1	
		FILTERS		
FL301	VLF0639	FILTER	1	
FL302	ELB4M022	FILTER	1	
FL303	VLF0727	FILTER	1	
FL801	ELB4W002	FILTER	1	
FL3001	VLF0413	FILTER	1	
FL3301	ELB4R031	FILTER	1	
FL3302	VLF0766	FILTER	1	
FL3303	VLF0765	FILTER	1	
FL3501,02	VLF0523	FILTER	2	
FL3503,04	VLF0526	FILTER	2	
FL3505	ELB4H054	FILTER	1	
FL4501	VLF0947	FILTER	1	
		INTEGRATED CIRCUITS		
IC301	VEFH20B	IC	1	
IC302	MSM6965-3RS	IC	1	
IC701	M51366SP	IC	1	
IC801	VCR0284	IC	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC802	NJM2233BMA	IC	1	
IC803	M52063SP	IC	1	
IC2001	AN3727S	IC	1	
IC2002	UPC358G2	IC	1	
IC2003	MN4066BS	IC	1	
IC2501	BA6435S	IC	1	
IC2502	UPC358G2	IC	1	
IC2503	SI-3090CLF	IC	1	
IC2504	TPIC0130N	IC	1	
IC3001,02	NJM2234MA	IC	2	
IC3003	M52055FP	IC	1	
IC3004	AN3581S	IC	1	
IC3301	M52083FP	IC	1	
IC3302	AN6308S	IC	1	
IC3504	CXL1009P	IC	1	
IC3505	AN78L09	IC	1	
IC3801	AN3497SB	IC	1	
IC3901	M52474P	IC	1	
IC3902	BA7004	IC	1	
IC4001	RC4565DD	IC	1	
IC4501	BH7770KS	IC	1	
IC4601	BA7755AF	IC	1	
IC4901	LA7155M	IC	1	
IC4902	MN4066BS	IC	1	
IC6001	MN67431VREQ	IC	1	
IC6002	MC14519BF	IC	1	
IC6003	BU5863F	IC	1	
IC6004	MN1280S	IC	1	(S)
IC7301	TDA3803A	IC	1	
IC7302	TA8721SN	IC	1	
IC7401	M66006FP	IC	1	
IC7851	MN158413VBBY	IC	1	
IC7852	MN1280S	IC	1	(S)
IC7853	SDA5642	IC	1	
		CONNECTORS		
J3951,52	VJS1470	CONNECTOR (FEMALE)	2	
		COILS		
L303	ELESQ101KA	COIL 100UH	1	
L304	VLQ0407101K	COIL 100UH	1	
L305,06	ELESQ101KA	COIL 100UH	2	
L308	ELESP18OJA	COIL 18UH	1	
L701	ELESP680KA	COIL 68UH	1	
L711	ELQIR22XB	COIL 0.22UH	1	
L714	VLQ0305J1R2	COIL 1.2UH	1	
L715	VLQ0213K680	COIL 68UH	1	
L716	ELESP560KA	COIL 56UH	1	
L717,18	ELESP680KA	COIL 68UH	2	
L719	ELESP120KA	COIL 12UH	1	
L781	ELESP680KA	COIL 68UH	1	
L803,04	ELESQ101KA	COIL 100UH	2	
L805	VLQ0188J330	COIL 33UH	1	
L806,07	ELESQ681KA	COIL 680UH	2	
L808	ELESQ331KA	COIL 330UH	1	
L809	VLQ0188J470	COIL 47UH	1	
L810	VLQ0407101K	COIL 100UH	1	
L811-13	VLQ0188J150	COIL 15UH	3	
L814	VLQ0188J330	COIL 33UH	1	
L815	ELESQ101KA	COIL 100UH	1	
L2001	ELESQ101KA	COIL 100UH	1	
L2002	VLP0099	COIL	1	
L2003	VLQ0569	COIL	1	
L2004	VLQ0552	COIL	1	
L2501	ELESP102KA	COIL 1000UH	1	
L2502,03	ELESQ101KA	COIL 100UH	2	
L2505	VLQ0558K331	COIL 330UH	1	
L2506	ELC07B009	COIL	1	
L3001-03	ELESQ101KA	COIL 100UH	3	
L3005	ELESQ101KA	COIL 100UH	1	
L3006	VLQ0398	COIL	1	
L3007	ELESQ101KA	COIL 100UH	1	
L3008-11	VLQ0556	COIL	4	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
L3301	VLQ0188J150	COIL 15UH	1	
L3303	VLQ0188J101	COIL 100UH	1	
L3306	VLQ0188J390	COIL 39UH	1	
L3307	VLQ0188J120	COIL 12UH	1	
L3308	VLQ0188J330	COIL 33UH	1	
L3309	VLQ0188J181	COIL 180UH	1	
L3310	VLQ0188J270	COIL 27UH	1	
L3311	VLQ0188J820	COIL 82UH	1	
L3312	VLQ0188J151	COIL 150UH	1	
L3313	ELESQ681KA	COIL 680UH	1	
L3314	VLQ0188J101	COIL 100UH	1	
L3315,16	VLQ0188J5R6	COIL 5.6UH	2	
L3317	VLQ0188J120	COIL 12UH	1	
L3318,19	ELESQ101KA	COIL 100UH	2	
L3322,23	ELESQ101KA	COIL 100UH	2	
L3501-03	VLQEL05F101K	COIL 100UH	3	
L3510	VLP0053	COIL	1	
L3801	ELESQ101KA	COIL 100UH	1	
L3802,03	VLQ0188J150	COIL 15UH	2	
L3804	VLQ0188J151	COIL 150UH	1	
L3805	VLQ0188J270	COIL 27UH	1	
L3901-03	ELESQ101KA	COIL 100UH	3	
L4001	ELESP471KA	COIL 470UH	1	
L4002,03	ELESQ101KA	COIL 100UH	2	
L4501,02	ELESQ101KA	COIL 100UH	2	
L4601	VLQEL07F153	COIL 15MH	1	
L4901	ELESP102KA	COIL 1000UH	1	
L4902,03	ELESQ101KA	COIL 100UH	2	
L4904-06	ELESP102KA	COIL 1000UH	3	
L4907-10	ELESQ101KA	COIL 100UH	4	
L4911,12	ELESP102KA	COIL 1000UH	2	
L6001	VLP0074	COIL	1	
L7301	ELESP102KA	COIL 1000UH	1	
L7401-03	ELESQ101KA	COIL 100UH	3	
		CONNECTORS		
P001	VJS1738	CONNECTOR (FEMALE)	1	
P501	VJS1238T	CONNECTOR (FEMALE)	1	
P501	VJS1743	CONNECTOR (FEMALE)	1	
P551	VJS1741	CONNECTOR (FEMALE)	1	
P1001	VJP2593	CONNECTOR (MALE)	1	
P1001	VJS2593	CONNECTOR (FEMALE)	1	
P1101	VJS1932T	CONNECTOR (FEMALE)	1	
P1103	VJS1142	CONNECTOR (FEMALE)	1	
P1502	VJS1141	CONNECTOR (FEMALE)	1	
P2002	VJP1232T	CONNECTOR (MALE) 5P	1	
P2002	VJS1738	CONNECTOR (FEMALE)	1	
P2003	VJP1229T	CONNECTOR (MALE) 2P	1	
P2501	VJS3193B015A	CONNECTOR (FEMALE)	1	
P2502	VJP1744T	CONNECTOR (MALE) 4P	1	
P2502	VJS1231R	CONNECTOR (FEMALE)	1	
P3001	VJP3078	CONNECTOR (MALE)	1	
P3001	VJS1743	CONNECTOR (FEMALE)	1	
P3001	VJS3078	CONNECTOR (FEMALE)	1	
P3003	VJP1235T	CONNECTOR (MALE) 8P	1	
P3003	VJS1235T	CONNECTOR (FEMALE)	1	
P3004	VJP3081	CONNECTOR (MALE)	1	
P3004	VJS3081	CONNECTOR (FEMALE)	1	
P3005	VJP1231T	CONNECTOR (MALE) 4P	1	
P3005	VJS1737	CONNECTOR (FEMALE)	1	
P3006	VJP3080	CONNECTOR (MALE)	1	
P3006	VJS3080	CONNECTOR (FEMALE)	1	
P3007	VJP1229T	CONNECTOR (MALE) 2P	1	
P3007	VJS1735	CONNECTOR (FEMALE)	1	
P3301	VJP1229T	CONNECTOR (MALE) 2P	1	
P3301	VJS1735	CONNECTOR (FEMALE)	1	
P3506	VJS2776	CONNECTOR (FEMALE)	1	
P3507	VJS2775	CONNECTOR (FEMALE)	1	
P3951	VJF0171T	CONNECTOR	1	
P3991	VJS1235T	CONNECTOR (FEMALE)	1	
P4001	VJP3103	CONNECTOR (MALE)	1	
P4002	VJP1235T	CONNECTOR (MALE) 8P	1	
P4002	VJS1741	CONNECTOR (FEMALE)	1	
P4003	VJP1229T	CONNECTOR (MALE) 2P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
P4003	VJS1229T	CONNECTOR (FEMALE)	1	
P4004	VJP3079	CONNECTOR (MALE)	1	
P4004	VJS3079	CONNECTOR (FEMALE)	1	
P6001	VJS3193A015A	CONNECTOR (FEMALE)	1	
P6004	VJS2571A004	CONNECTOR (FEMALE)	1	
P6501	VJS1744	CONNECTOR (FEMALE)	1	
P6502	VJS3079	CONNECTOR (FEMALE)	1	
P7403	VJS1744	CONNECTOR (FEMALE)	1	
P7501	VJS3193A016A	CONNECTOR (FEMALE)	1	
P7502	VJS1455	CONNECTOR (FEMALE)	1	
P7503	VJP3079	CONNECTOR (MALE)	1	
P9001	VJS3080	CONNECTOR (FEMALE)	1	
P9002	VJS1737	CONNECTOR (FEMALE)	1	
		CONNECTORS		
PK3021-24	VJR0190	PACK PIN	4	
PP2501	VJP3043G010W	CONNECTOR (MALE)	1	
PP2502	VJP3043G008W	CONNECTOR (MALE)	1	
PP2503	VJP3043G012W	CONNECTOR (MALE)	1	
PP3001	VJP3044G009W	CONNECTOR (MALE)	1	
PP3002,03	VJP3044G012W	CONNECTOR (MALE)	2	
PP3011,12	VJP3042A018W	CONNECTOR (MALE)	2	
PP3301	VJP2776	CONNECTOR (MALE)	1	
PP3302	VJP2775	CONNECTOR (MALE)	1	
PP4001-03	VJP3186A018	CONNECTOR (MALE)	3	
PP7401-03	VJP3043A005W	CONNECTOR (MALE)	3	
PP7404	VJP3043A006W	CONNECTOR (MALE)	1	
PP7705	VJP3043A004W	CONNECTOR (MALE)	1	
PS701-03	VJS3043B005W	CONNECTOR (FEMALE)	3	
PS704	VJS3043B006W	CONNECTOR (FEMALE)	1	
PS2501	VJS3043B010W	CONNECTOR (FEMALE)	1	
PS2502	VJS3043F008W	CONNECTOR (FEMALE)	1	
PS2503	VJS3043F012W	CONNECTOR (FEMALE)	1	
PS3001	VJS3044F009W	CONNECTOR (FEMALE)	1	
PS3002,03	VJS3044F012W	CONNECTOR (FEMALE)	2	
PS3011,12	VJS3042F018W	CONNECTOR (FEMALE)	2	
PS4001-03	VJS3186B018	CONNECTOR (FEMALE)	3	
PS7301,02	VJR0477	PACK PIN	2	
		TRANSISTORS		
Q301-03	MSC2295	TRANSISTOR	3	
Q703	MSD601-S	TRANSISTOR	1	
Q712	2SD1992	TRANSISTOR	1	
Q771	MSD601-S	TRANSISTOR	1	
Q801	MSB709	TRANSISTOR	1	
Q802	MSD601	TRANSISTOR	1	
Q804	MSB709	TRANSISTOR	1	
Q1001	2SD1996	TRANSISTOR	1	
Q1701	2SD1994-S	TRANSISTOR	1	
Q2001	2SD1915F	TRANSISTOR	1	
Q2002	MSB709	TRANSISTOR	1	
Q2003	MSD601	TRANSISTOR	1	
Q2501	2SB772	TRANSISTOR	1	
Q3001,02	MSD601	TRANSISTOR	2	
Q3003	2SD1328	TRANSISTOR CHIP	1	
Q3004,05	MSC2295	TRANSISTOR	2	
Q3006	MSB709	TRANSISTOR	1	
Q3007	MSD601	TRANSISTOR	1	
Q3301,02	MSC2295	TRANSISTOR	2	
Q3304,05	MSD601	TRANSISTOR	2	
Q3306	MSB709	TRANSISTOR	1	
Q3307,08	MSC2295	TRANSISTOR	2	
Q3309	MSD601	TRANSISTOR	1	
Q3310	MSB709	TRANSISTOR	1	
Q3315,16	MSC2295	TRANSISTOR	2	
Q3317	MSD601	TRANSISTOR	1	
Q3319	MSB709	TRANSISTOR	1	
Q3320	MSD601	TRANSISTOR	1	
Q3506	2SC2295	TRANSISTOR	1	
Q3507	2SB709	TRANSISTOR CHIP	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
Q3508	2SC2295	TRANSISTOR	1	
Q3801	MSD601	TRANSISTOR	1	
Q3804	MSC2295	TRANSISTOR	1	
Q3805	MSB709	TRANSISTOR	1	
Q3901	MSD601	TRANSISTOR	1	
Q3902	2SB1320	TRANSISTOR	1	
Q3903	MSD601	TRANSISTOR	1	
Q3904	MSB709	TRANSISTOR	1	
Q3908	2SD1328	TRANSISTOR CHIP	1	
Q3909	MSD601	TRANSISTOR	1	
Q3910	MSB709	TRANSISTOR	1	
Q4002	2SB790	TRANSISTOR	1	
Q4003	MSB709	TRANSISTOR	1	
Q4004	2SB790	TRANSISTOR	1	
Q4005	2SB1321	TRANSISTOR	1	
Q4006	2SD1992A-R	TRANSISTOR	1	(R)
Q4007,08	MSD601	TRANSISTOR	2	
Q4011,12	MSD601	TRANSISTOR	2	
Q4015,16	2SD1328	TRANSISTOR CHIP	2	
Q4501	2SD655	TRANSISTOR	1	
Q4551	2SB561	TRANSISTOR	1	
Q4601,02	MSD1328	TRANSISTOR	2	
Q6001	2SD1991	TRANSISTOR	1	
Q6003	2SD893	TRANSISTOR	1	
Q6004,05	2SD1994-S	TRANSISTOR	2	(S)
Q6006	MSD602	TRANSISTOR	1	
Q6007,08	MSD601	TRANSISTOR	2	
Q6101	MSD601	TRANSISTOR	1	
Q6102	MSB709	TRANSISTOR	1	
Q7301	MSD601-S	TRANSISTOR	1	
Q7304,05	MSD601	TRANSISTOR	2	
Q7306	2SC2404-C	TRANSISTOR CHIP	1	(C,D)
Q7307	2SD1328	TRANSISTOR	1	
Q7401	2SB1320	TRANSISTOR	1	
		COMBINATION PARTS		
QR301	MRN2402	TRANSISTOR	1	
QR302	MRN1404	TRANSISTOR	1	
QR304,05	MRN1404	TRANSISTOR	2	
QR306	MRN1402	TRANSISTOR	1	
QR308	MRN1402	TRANSISTOR	1	
QR309	MRN2404	TRANSISTOR	1	
QR310	MRN1404	TRANSISTOR	1	
QR312	MRN1404	TRANSISTOR	1	
QR701,02	MRN1404	TRANSISTOR	2	
QR711,12	MRN1403	TRANSISTOR	2	
QR801	MRN1404	TRANSISTOR	1	
QR802	MRN1407	TRANSISTOR	1	
QR803,04	MRN1402	TRANSISTOR	2	
QR805,06	MRN1404	TRANSISTOR	2	
QR807	MRN1402	TRANSISTOR	1	
QR808	MRN1403	TRANSISTOR	1	
QR809	MRN1404	TRANSISTOR	1	
QR810	MRN2404	TRANSISTOR	1	
QR1001,02	MRN1402	TRANSISTOR	2	
QR2001,02	MRN1403	TRANSISTOR	2	
QR2502	MRN1403	TRANSISTOR	1	
QR2503	MRN1404	TRANSISTOR	1	
QR2504	MRN2404	TRANSISTOR	1	
QR3001	MRN2403	TRANSISTOR-RESISTOR	1	
QR3002-06	MRN1404	TRANSISTOR	5	
QR3008	DTC363EK	TRANSISTOR-RESISTOR	1	
QR3009	MRN2402	TRANSISTOR	1	
QR3010	MRN1402	TRANSISTOR	1	
QR3011	MRN1407	TRANSISTOR	1	
QR3012	MRN2402	TRANSISTOR	1	
QR3013	MRN1402	TRANSISTOR	1	
QR3014	MRN1404	TRANSISTOR	1	
QR3301-04	DTC363EK	COMBI.TR-R	4	
QR3305	MRN2403	TRANSISTOR-RESISTOR	1	
QR3306	DTC363EK	TRANSISTOR-RESISTOR	1	
QR3901	MRN1403	TRANSISTOR	1	
QR3902	MRN1402	TRANSISTOR	1	
QR4001	MRN1404	TRANSISTOR	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
QR4002	MRN1402	TRANSISTOR	1	
QR4003	MRN1403	TRANSISTOR	1	
QR4004,05	MRN1402	TRANSISTOR	2	
QR4006	MRN1404	TRANSISTOR	1	
QR4007	MRN1403	TRANSISTOR	1	
QR4009,10	MRN1403	TRANSISTOR	2	
QR4012-14	MRN1404	TRANSISTOR	3	
QR4016	MRN1402	TRANSISTOR	1	
QR4017	MRN1404	TRANSISTOR	1	
QR4508,09	MRN2404	TRANSISTOR	2	
QR4510	MRN1403	TRANSISTOR	1	
QR4602	MRN2402	TRANSISTOR	1	
QR4603	MRN1404	TRANSISTOR	1	
QR4901	MRN1404	TRANSISTOR	1	
QR4902	UN211D	TRANSISTOR-RESISTOR	1	
QR6001,02	MRN2402	TRANSISTOR	2	
QR6003	MRN1402	TRANSISTOR	1	
QR6004	UN211H	IC	1	
QR6005	MRN2404	TRANSISTOR	1	
QR6006	UN211H	IC	1	
QR6007	MRN2404	TRANSISTOR	1	
QR6008	MRN2402	TRANSISTOR	1	
QR6009,10	MRN1404	TRANSISTOR	2	
QR6011,12	MRN1402	TRANSISTOR	2	
QR6014	MRN2404	TRANSISTOR	1	
QR6101	MRN1404	TRANSISTOR	1	
QR6102,03	MRN1402	TRANSISTOR	2	
QR6104	MRN1404	TRANSISTOR	1	
QR7301,02	MRN1404	TRANSISTOR	2	
QR7312-14	MRN1402	TRANSISTOR	3	
QR7315,16	MRN1404	TRANSISTOR	2	
QR7401	MRN1404	TRANSISTOR	1	
QR7402	DTC124TK	TRANSISTOR-RESISTOR	1	
QR7801	MRN2402	TRANSISTOR	1	
QR7802	MRN1404	TRANSISTOR	1	
QR7851	MRN1402	TRANSISTOR	1	
QR7852	MRN1404	TRANSISTOR	1	
		RESISTORS		
R301,02	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R308	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R309	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R310	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R311	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R320,21	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R322	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R323	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R324	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R325	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R326	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R327	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R328	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R329	ERJ6GMYJ181	M.RESISTOR CH 1/10W 180	1	
R330	ERJ6GMYJ911	M.RESISTOR CH 1/10W 910	1	
R331	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R332	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R333	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R334	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R335	ERDS2TJ151	C.RESISTOR 1/4W 150	1	
R336	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R337	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R338	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R340	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R341	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R342	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R343	ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R344	ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R345	ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R716	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R717	ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R718	ERJ6GEYJ754	M.RESISTOR CH 1/10W 750K	1	
R719,20	ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	2	
R721	ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R722	ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R723	ERJ6GEYJ183	M.RESISTOR CH 1/10W 18K	1	
R724	ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R725	ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R726	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R727	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R728	ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R737	ERJ6GEYJ274	M.RESISTOR CH 1/10W 270K	1	
R738	ERJ6GEYJ334	M.RESISTOR CH 1/10W 330K	1	
R740	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R741	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R743	ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R744	ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R745	ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R746	ERDS2TJ181	C.RESISTOR 1/4W 180	1	
R747	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R750	ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R759	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R772	ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R773	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R774	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R781	ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R782	ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R792	ERDS2TJ120	C.RESISTOR 1/4W 12	1	
R802	ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R803	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R804	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R805,06	ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	2	
R807	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R809	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R810	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R811	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R812	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R813	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R814	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R815	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R816	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R817	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R818	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R819	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R820	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R821	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R822	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R823	ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R824	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R825	ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R826	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R831	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R832,33	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R835	ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R836-38	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	3	
R839,40	ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	2	
R841	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R842	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R843	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R844	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R845	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R846	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R847	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R848	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R849,50	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	2	
R851	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R852	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R853	ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R854	ERJ6GEYJ684	M.RESISTOR CH 1/10W 680K	1	
R1002	ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R1003	ERJ6GMZOR00	M.RESISTOR CH 1/10W 0	1	
R1004	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R1701	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R1702	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R1703	ERJ6GMZOR00	M.RESISTOR CH 1/10W 0	1	
R2001,02	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2003	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2005,06	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2007	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2008,09	ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R2010	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2011	ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R2012	ERJ6GMYG392	M.RESISTOR CH 1/10W 3.9K	1	
R2013	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2014	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2015	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2016	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2017	ERJ6GMYJ123	M.RESISTOR CH 1/10W 12K	1	
R2018	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2019	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R2020	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R2021	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2022,23	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	2	
R2024	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R2025	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2501	ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R2502	ERJ6GMYG752	M.RESISTOR CH 1/10W 7.5K	1	
R2503	ERJ6GMYG622	M.RESISTOR CH 1/10W 6.2K	1	
R2504	ERJ6GMYG512	M.RESISTOR CH 1/10W 5.1K	1	
R2505	ERJ6GMYG513	M.RESISTOR CH 1/10W 51K	1	
R2507	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2508-10	ERDS2TJ560	C.RESISTOR 1/4W 56	3	
R2511,12	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R2513	ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2514	ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2515	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R2516	ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2517	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R2520	ERDS2TJ681	C.RESISTOR 1/4W 680	1	
R2521	ERDS1TJ681	C.RESISTOR 1/2W 680	1	
R2522	ERJ6GMYG473	M.RESISTOR CH 1/10W 47K	1	
R2523	ERJ6GMYG123	M.RESISTOR CH 1/10W 12K	1	
R2524	ERJ6GMYG393	M.RESISTOR CH 1/10W 39K	1	
R2525	ERJ6GMYG124	M.RESISTOR CH 1/10W 120K	1	
R2526	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R2528	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R2529	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R2530	ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R2531	ERJ6GMYG392	M.RESISTOR CH 1/10W 3.9K	1	
R2532	ERJ6GMYG473	M.RESISTOR CH 1/10W 47K	1	
R2534	ERSF30JR90	M.RESISTOR 0.9	1	
R2535	ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2537	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2538	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R2539	ERJ6GMYJ622	M.RESISTOR CH 1/10W 6.2K	1	
R2540	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2541	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R2542	ERX12SJR47	M.RESISTOR 1/2W 0.47	1	
R2543	ERJ6GMYJ824	M.RESISTOR CH 1/10W 820K	1	
R2544	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3001,02	ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	2	
R3003,04	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R3005,06	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R3007	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3008	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3009	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3010	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R3011	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3012	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3013	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3014	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3015	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3016	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3018,19	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R3020	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3021	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3022,23	ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	2	
R3024	ERJ6GMYG471	M.RESISTOR CH 1/10W 470	1	
R3025	ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	1	
R3026	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3027	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3028	ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3029	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R3030	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3031	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3032	ERJ6GMYG202	M.RESISTOR CH 1/10W 2K	1	
R3033	ERJ6GMYG222	M.RESISTOR CH 1/10W 2.2K	1	
R3034,35	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	2	
R3037	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3038	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3039-42	ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	4	
R3044	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3045	ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R3301	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3302	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R3303	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3304	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3305	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3306	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3308	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3310	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3311-13	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	3	
R3320,21	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R3322	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R3323	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R3324	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3325,26	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R3327	ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R3328	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3329	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R3330	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3331	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3332	ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R3333	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3334	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R3335	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3336,37	ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	2	
R3338	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3339	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3340	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3341	ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R3342	ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R3343	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3344-47	ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	4	
R3348	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3349	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3350	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3351	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3352	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3353,54	ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	2	
R3355	ERJ6GMYG152	M.RESISTOR CH 1/10W 1.5K	1	
R3356	ERJ6GMYG112	M.REISITOR CH 1/10W 1.1K	1	
R3366	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3367	ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R3368	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3369	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3370	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3371	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R3375,76	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	2	
R3377	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3378	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3379	ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R3380	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3387	ERJ6GMYG202	M.RESISTOR CH 1/10W 2K	1	
R3388	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3390	ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	1	
R3392	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3393	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3501	ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R3502	ERJ6CEYJ224	M.RESISTOR CH 1/10W 220K	1	
R3503	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3504	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R3505	ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R3506	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R3507	ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R3508,09	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	2	
R3510	ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3517	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3535	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3802	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R3803		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3804		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3806		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R3807		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3809		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3810		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3811		ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R3812		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R3813		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3814		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R3822		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3823		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3824,25		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	2	
R3826		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3901-04		ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	4	
R3905		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R3906		ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R3907		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3908,09		ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	2	
R3910		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R3916		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3917		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R3918		ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	1	
R3919		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3920		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3921		ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R3922		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R3923,24		ERJ6GEYJ151	M.RESISTOR CH 1/10W 150	2	
R3926,27		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	2	
R3928		ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	1	
R3938,39		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R3940		ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	1	
R3941-44		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	4	
R3945,46		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	2	
R3947,48		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R3949		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3950		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3951-53		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	3	
R4001		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R4003,04		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R4005		ERDS2TJ680	C.RESISTOR 1/4W 68	1	
R4006,07		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R4008		ERDS2TJ680	C.RESISTOR 1/4W 68	1	
R4009		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R4010		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4012		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4013		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4014		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4015		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R4018		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4019		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R4022		ERJ6GMYG100	M.RESISTOR CH 1/10W 10	1	
R4025		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4026		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4033		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R4034		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4035		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R4036		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R4037		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4038,39		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R4040		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4041,42		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	2	
R4044		ERJ6GMYG433	M.RESISTOR CH 1/10W 43K	1	
R4045		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R4047		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4048-51		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	4	
R4052		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4053		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4054		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R4055		ERJ6GMYJ123	M.RESISTOR CH 1/10W 12K	1	
R4101		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4102		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R4103		ERJ6GMYG682	M.RESISTOR CH 1/10W 6.8K	1	
R4104		ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4501,02		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4503		VRE0071E36C	M.RESISTOR	1	
R4504,05		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	2	
R4506,07		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	2	
R4508		ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
R4509		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4510		ERJ6GEYJ621	M.RESISTOR CH 1/10W 620	1	
R4511		ERJ6GEYG303	M.RESISTOR CH 1/10W 30K	1	
R4512		VRE0034E163	M.RESISTOR CH 1/10W 16K	1	
R4513		ERJ3GEYG103	M.RESISTOR CH 1/16W 10K	1	
R4514,15		ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	2	
R4518,19		ERJ6GM2OR00	M.RESISTOR CH 1/10W 0	2	
R4522		ERJ6GEYJ225	M.RESISTOR CH 1/10W 2.2M	1	
R4527		VRE0034E333	M.RESISTOR CH 1/10W 33K	1	
R4528		VRE0034E153	M.RESISTOR CH 1/10W 15K	1	
R4529		ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
R4530		ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R4534		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4535		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4539		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4540		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4541		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4542		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4543		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4551,52		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	2	
R4553		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R4554		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R4558		ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
R4561		ERJ6GEYG303	M.RESISTOR CH 1/10W 30K	1	
R4562		VRE0034E10C	M.RESISTOR 1/10W	1	
R4563		ERJ3GEYG272	M.RESISTOR CH 1/16W 2.7K	1	
R4568		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R4569		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R4573		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4577		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4578		VRE0034E473	M.RESISTOR CH 1/10W 47K	1	
R4581		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4583		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R4584		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4585		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4586		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4587,88		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	2	
R4591		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4592		ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	1	
R4593		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4594		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4603		ERJ3GEYG183	M.RESISTOR CH 1/16W 18K	1	
R4606		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4610		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R4611		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R4612		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R4613		ERJ6GEYJ394	M.RESISTOR CH 1/10W 390K	1	
R4615		ERJ6GEYJ133	M.RESISTOR CH 1/10W 13K	1	
R4616		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R4638		ERJ6GM2OR00	M.RESISTOR CH 1/10W 0	1	
R4649		ERJ3GEYG470	M.RESISTOR 1/16W 47	1	
R4651		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R4652		ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R4653		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R4654		ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R4655		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4656		ERJ6GEYGZ43	M.RESISTOR CH 1/10W 24K	1	
R4657		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R4666		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R4901		ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R4902		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4903		ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R4904		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4905		ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R4906		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4907		ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R4908		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4909,10		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	2	
R4911		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4912		ERJ6GEYG163	M.RESISTOR CH 1/10W 16K	1	
R4913,14		ERJ6GEYG433	M.RESISTOR CH 1/10W 43K	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R4915	ERJ6GEYG163	M.RESISTOR CH 1/10W 16K	1	
R4916	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4917-20	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	4	
R4921	ERJ6GEYG303	M.RESISTOR CH 1/10W 30K	1	
R4922,23	ERJ6GEYG243	M.RESISTOR CH 1/10W 24K	2	
R4924	ERJ6GEYG303	M.RESISTOR CH 1/10W 30K	1	
R4925,26	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	2	
R4927,28	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	2	
R6001	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R6002	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6003	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R6004	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R6005	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R6006,07	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	2	
R6008-10	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	3	
R6011	ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R6012	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6013	ERD62TJ103	C.RESISTOR 1/4W 10K	1	
R6014-20	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	7	
R6021	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R6022	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R6023	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R6027	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R6028	ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R6029	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R6030	ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R6031	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R6032	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R6033	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R6034	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R6035	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R6036	ERJ6GEYG201	M.RESISTOR CH 1/10W 200	1	
R6037	ERG2SJ150	M.RESISTOR 2W 15	1	
R6038	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6039	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R6040	ERD2FCG220	C.RESISTOR 2W 22	1	<1>
R6041	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R6043,44	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	2	
R6045	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R6046	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6047	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R6048,49	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R6050,51	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R6052	ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R6053	ERJ6GMYJ184	M.RESISTOR CH 1/10W 180K	1	
R6054	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R6055	ERJ6GMYJ181	M.RESISTOR CH 1/10W 180	1	
R6057	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6058	ERJ6GEYG131	M.RESISTOR CH 1/10W 130	1	
R6059	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R6060,61	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R6062	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R6063	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6064	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R6101	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R6102,03	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R6104,05	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R6108,09	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	2	
R6110	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R6111	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R6305	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R7302	ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R7303	ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R7304	ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R7305	ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R7306	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R7307	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R7308	ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R7309	ERD52TJ102	C.RESISTOR 1/4W 1K	1	
R7310	ERJ6GEYJ474	M.RESISTOR CH 1/10W 470K	1	
R7311	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R7312	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	1	
R7313	ERJ6GEYJ824	M.RESISTOR CH 1/10W 820K	1	
R7314,15	ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	2	
R7316	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R7317	ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	1	
R7318	ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R7321	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7322	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7323	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7324,25	ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	2	
R7329	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7330	ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7334-37	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	4	
R7338	ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R7339	ERJ6GEYJ330	M.RESISTOR CH 1/10W 33	1	
R7340	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R7341	ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R7342	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7345	ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R7346	ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R7347	ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R7348	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R7349	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7351-53	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	3	
R7354,55	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R7401	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7402	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R7403	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R7405-13	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	9	
R7416,17	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R7419	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7420,21	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R7422-24	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	3	
R7656	ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R7676	ERG1SJ152	M.RESISTOR 1W 1.5K	1	
R7801	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R7802	ERJ6GEYJ824	M.RESISTOR CH 1/10W 820K	1	
R7803,04	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R7805	ERJ6GEYJ824	M.RESISTOR CH 1/10W 820K	1	
R7806	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R7807	ERJ6GEYG512	M.RESISTOR CH 1/10W 5.1K	1	
R7808	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R7821	ERJ6GEYJ2ZZ	M.RESISTOR CH 1/10W 2.2K	1	
R7822	ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R7851	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7860	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
		SWITCHES		
SW3901	VSS0157	SWITCH	1	
		TRANSFORMERS		
T703	EIV5EC013A	TRANSFORMER	1	
T704	EIV5EC006A1	TRANSFORMER	1	
T1701	VLT0683	TRANSFORMER	1	
T4001	EIQ7QF013Q	TRANSFORMER	1	
T7301	EIR7QG001B	IF TRANSFORMER	1	
T7302,03	EIL7QH012Q	TRANSFORMER	2	
T7304	EIS5EC007A	TRANSFORMER	1	
T7305	EIS5EC005A	TRANSFORMER	1	
		VARIABLE RESISTORS		
VR301	EVN32CA00B23	V.RESISTOR 2K	1	
VR302,03	EVN32CA00B13	V.RESISTOR 1K	2	
VR304	EVMF6SA00B23	V.RESISTOR 2K	1	
VR701,02	EVTF6SA00B23	V.RESISTOR 2K	2	
VR741	EVNDXAA00B14	V.RESISTOR 10K	1	
VR801	EVND1AA00B14	V.RESISTOR 10K	1	
VR802	EVMF6SA00B14	V.RESISTOR 10K	1	
VR2001	EVNDXAA00B54	V.RESISTOR 50K	1	
VR2006	EVNDXAA00B15	V.RESISTOR 100K	1	
VR2011	EVNDXAA00B15	V.RESISTOR 100K	1	
VR2018,19	EVNDXAA00B15	V.RESISTOR 100K	2	
VR3001-03	EVNDXAA00B23	V.RESISTOR 2K	3	
VR3004	EVMEASA01B54	V.RESISTOR	1	
VR3301	EVMF6SA00B24	V.RESISTOR 20K	1	
VR3302	EVN32CA00B54	V.RESISTOR 50K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
VR3304,05		EVN32CA00B52	V.RESISTOR 500	2	
VR3306		EVNDXAA00B23	V.RESISTOR 2K	1	
VR3801		EVMF6SA00B13	V.RESISTOR	1	
VR3802		EVMF6SA00B23	V.RESISTOR 2K	1	
VR4001		EVNDXAA00B25	V.RESISTOR 200K	1	
VR4501		EVMFLSA00B53	V.RESISTOR	1	
VR4502		EVMF6SA00B24	V.RESISTOR 20K	1	
VR4507		EVMF6SA00B24	V.RESISTOR 20K	1	
VR4509		EVMFLSA00BY3	V.RESISTOR	1	
VR4512		EVNDXAA00B52	V.RESISTOR 500	1	
VR4550		EVMFLSA00BS3	V.RESISTOR	1	
VR4551,52		EVMF6SA00B55	V.RESISTOR	2	
VR7301		EVMF6SA00B14	V.RESISTOR 10K	1	
VR7326		EVMF6SA00B52	V.RESISTOR	1	
VR7328		EVMF6SA00B52	V.RESISTOR	1	
VR7340		EVNE4AA00B14	V.RESISTOR 10K	1	
VR7342		EVNE4AA00B53	V.RESISTOR 5K	1	
VR7344		EVNE4AA00B14	V.RESISTOR 10K	1	
			CRYSTAL OSCILLATORS		
X301		VSX0225	CRYSTAL OSCILLATOR	1	
X710		EFCH38MGP1	CRYSTAL OSCILLATOR	1	
X711		VLF0638	CRYSTAL OSCILLATOR	1	
X716,17		EFCA40R4GM1	FILTER	2	
X801		VSX0406	CRYSTAL OSCILLATOR	1	
X3502		VSX0323	CRYSTAL OSCILLATOR	1	
X3901		VSX0099	CRYSTAL OSCILLATOR	1	
X6001		VSX0415	CRYSTAL OSCILLATOR	1	
X6002		VSX0258	CRYSTAL OSCILLATOR	1	
X6003		VSQ0565	CRYSTAL OSCILLATOR	1	
X7301,02		EFCS5R5MS5B	CRYSTAL OSCILLATOR	2	
X7303,04		EFCS5R74MS5B	CRYSTAL OSCILLATOR	2	
X7305		ELB5A016	FILTER	1	
X7851		EFOA4ROM03C2	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		VJF0442	CLAMPER	1	
		VJF0004	CLAMPER	1	
		VJF0309	CLAMPER	1	
		VJH0650	JACK PLATE	1	
		ENC17984	RF CONVERTER	1	<!>
		VWJ16OW210BB	FLEXIBLE CADE	1	
		VWJ18OW150BB	FLEXIBLE CADE	1	
		VWJ04NB080QQ	FLEXIBLE CADE	1	(P6002-P1503)
		VMZ1352	HEAT SINK COVER	1	FOR SERVO C.B.A.
		VEJ1229	JACK PLATE UNIT	1	FOR INPUT/OUTPUT
		VGU2707	EDIT KNOB	4	FOR INPUT/OUTPUT
		VSC2911	SHIELD COVER (TOP)	2	FOR 1H DELAY CCD U.
		VSC2912	SHIELD COVER (MAIN)	1	FOR 1H DELAY CCD U.
		VJR0189	PACK PIN 10P	1	FOR VPS C.B.A.
		ENV57884H6	TUNER	1	<!> FOR TV DEMO.
		VSC3242	SHIELD COVER (MAIN)	1	FOR TV DEMO. C.B.A.
		VSC3241	SHIELD COVER (TOP)	1	FOR TV DEMO. C.B.A.
		VSC2714	SHIELD COVER (BOTTOM)	1	FOR TV DEMO. C.B.A.
	■	VEP06777C	MAIN C.B.A.		(NLA)NV-FS88EG
			CONNECTORS		
BP1004		VJF0094	CONNECTOR	1	
			CAPACITORS		
C303		ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C305		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C306		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C307		ECUM1H050CCN	C.CAPACITOR CH 50V 5P	1	
C308		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C309		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C310		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C311		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C312		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C319		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C320		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C321		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C322		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C323		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C324		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C325		ECEA1HK4R7	E.CAPACITOR 50V 4.7U	1	
C326		ECQV1H334JZ	P.CAPACITOR 50V 0.33U	1	
C327-30		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C331,32		ECEA1CK100	E.CAPACITOR 16V 10U	2	
C333		ECEA0JKZ20	E.CAPACITOR 6.3V 220U	1	
C334-36		ECEA1CK100	E.CAPACITOR 16V 10U	3	
C337		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C338		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C339		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C340		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C341		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C343		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C344		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C345		ECUM1H562KBN	C.CAPACITOR CH 50V 5600P	1	
C346		ECCF1H470JC4	C.CAPACITOR 50V 47P	1	
C701		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C702		ECEA1CKS100	E.CAPACITOR 16V 100U	1	
C703		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C707		ECEA1HK0R1	E.CAPACITOR 50V 0.1U	1	
C708		ECEA1CKS100	E.CAPACITOR 16V 100U	1	
C710		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C717-20		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C721		ECEA1HKR27K	E.CAPACITOR 50V 0.27U	1	
C722		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C723		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C725		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C727		ECUM1H080DCN	C.CAPACITOR CH 50V 80P	1	
C728		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C730		ECEA1CK100	E.CAPACITOR 16V 100U	1	
C731		ECEA1CKS100	E.CAPACITOR 16V 100U	1	
C734		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C739		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C740		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C741		ECEA1CK100	E.CAPACITOR 16V 100U	1	
C742		ECUM1H030CCN	C.CAPACITOR CH 50V 3P	1	
C743		ECUM1H270RSN	C.CAPACITOR CH 50V 27P	1	
C744		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C745		ECUM1H680JPN	C.CAPACITOR CH 50V 68P	1	
C746		ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C748		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C781		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C782		ECUM1H060DCN	C.CAPACITOR CH 50V 6P	1	
C790		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C806		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C807		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C808		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C809		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C810		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C811		ECEA1HK4R7	E.CAPACITOR 50V 4.7U	1	
C812		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C813		ECQV1H823JZ	P.CAPACITOR 50V 0.082U	1	
C814-16		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	3	
C817		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C818		ECQV1H224JZ	P.CAPACITOR 50V 0.22U	1	
C819		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C820		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C821		ECUM1H060DCN	C.CAPACITOR CH 50V 6P	1	
C822		ECRHA020041	TRIMMER	1	
C823		ECQV1H154JZ	P.CAPACITOR 50V 0.15U	1	
C824		ECUM1H471KBN	C.CAPACITOR CH 50V 470P	1	
C825		ECUM1H681KBN	C.CAPACITOR CH 50V 680P	1	
C826		ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C827		ECEA1HK010	E.CAPACITOR 50V 1U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C828		ECEA1HK3R3	E.CAPACITOR 50V 3.3U	1	
C829-31		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C832,33		ECUM1H104ZFN	C.CAPACITOR 50V	2	
C834		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C835		ECUM1H390JCN	C.CAPACITOR CH 50V 39P	1	
C836		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C837		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C838,39		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C840		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C841		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C842		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C843		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C844		ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	1	
C845		ECQB1H332JH	P.CAPACITOR 50V 0.27U	1	
C846		ECUM1C105ZFN	C.CAPACITOR 16V 1U	1	
C847		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C848		ECUM1H821KBN	C.CAPACITOR CH 50V 820P	1	
C849		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C850,51		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C852		ECUM1H120JCN	C.CAPACITOR CH 50V 12P	1	
C1003		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1004		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C1009		ECEA1AK330	E.CAPACITOR 10V 33U	1	
C1010		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C1701		ECKD2H471KB	E.CAPACITOR 500V 470P	1	
C1702		ECA1CM101	E.CAPACITOR 16V 100U	1	
C1703		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1704		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C1705		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C1706		ECA1VM100	E.CAPACITOR 35V 10U	1	
C1707		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1708		ECA1CM221	E.CAPACITOR 16V 220U	1	
C2001		ECEA1HK4R7	E.CAPACITOR 50V 4.7U	1	
C2002		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C2003		ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	1	
C2004		ECEA1HK3R3	E.CAPACITOR 50V 3.3U	1	
C2005		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C2006		ECUM1H471KBN	C.CAPACITOR CH 50V 470P	1	
C2007		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C2008		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C2009		VCYE1C104MR1	S.CAPACITOR 16V 0.1U	1	
C2010		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C2011,12		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	2	
C2013,14		ECEA1HKN3R3	E.CAPACITOR 50V 3.3U	2	
C2015		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C2016		ECQB1H472JH	P.CAPACITOR 50V 4700P	1	
C2017		ECQV1H184JZ	P.CAPACITOR 50V 0.18U	1	
C2019		ECQV1H683JZ	P.CAPACITOR 50V 0.068U	1	
C2020		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2021		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C2022		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C2023,24		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	2	
C2025		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C2026		ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C2027		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C2028		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C2029		ECQB1H392JH	P.CAPACITOR 50V 3900P	1	
C2501		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C2502		ECA0JM221	E.CAPACITOR 6.3V 220U	1	
C2503,04		ECQV1H333JZ	P.CAPACITOR 50V 0.033U	2	
C2505		ECEA1CU470	E.CAPACITOR 16V 47U	1	
C2506-09		ECQV1H333JZ	P.CAPACITOR 50V 0.033U	4	
C2510-12		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	3	
C2513,14		ECUM1C105ZFN	C.CAPACITOR 16V 1U	2	
C2515		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C2516		ECEA1HK4R7	E.CAPACITOR 50V 4.7U	1	
C2517		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C2518		ECEA1HKNR47	E.CAPACITOR 50V 0.47U	1	
C2519		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C2520		ECEA1HKNR47	E.CAPACITOR 50V 0.47U	1	
C2521		ECA1EM470	E.CAPACITOR 25V	1	
C2522		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C2524,25		ECA1CM221	E.CAPACITOR 16V 220U	2	
C2526		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C2527		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C2528		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C2529		ECUM1E224ZFM	C.CAPACITOR CH 25V 0.22U	1	
C2530		ECUM1E223KBN	C.CAPACITOR CH 25V 0.022U	1	
C2531		VCYE1C104MR1	S.CAPACITOR 16V 0.1U	1	
C3001		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3002		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C3003,04		ECEA1CK100	E.CAPACITOR 16V 10U	2	
C3006,07		ECUM1H104ZFN	C.CAPACITOR 50V	2	
C3009		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C3010		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C3011		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3012,13		ECUM1H104ZFN	C.CAPACITOR 50V	2	
C3014,15		ECEA0JK470	E.CAPACITOR 6.3V 47U	2	
C3016		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3017,18		ECEA1CK100	E.CAPACITOR 16V 10U	2	
C3019,20		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3021,22		ECEA1CK100	E.CAPACITOR 16V 10U	2	
C3023		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C3024		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C3025		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C3026		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3027,28		ECEA1HK010	E.CAPACITOR 50V 1U	2	
C3029		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3033		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C3034		ECA0JM331	E.CAPACITOR 6.3V 330U	1	
C3035		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C3036		ECA0JM331	E.CAPACITOR 6.3V 330U	1	
C3037		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C3038		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3039		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C3040		ECA0JM221	E.CAPACITOR 6.3V 220U	1	
C3041		ECEA1AKN470	E.CAPACITOR 10V 47U	1	
C3042		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C3043		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C3044		ECUM1H561KBN	C.CAPACITOR CH 50V 560P	1	
C3301		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C3302		ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C3304-08		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	5	
C3309		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C3310		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3313,14		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3315		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C3316		ECUM1H271JCN	C.CAPACITOR CH 50V 270P	1	
C3321		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C3322		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3323		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3324		ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C3325		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3326		ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C3327,28		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3329		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3330		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C3331		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3332		ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C3333		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C3334		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3335		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C3336		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C3337		ECUM1H060DCN	C.CAPACITOR CH 50V 6P	1	
C3338		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3339		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3340		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C3341		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3342		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3343		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3344		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C3345		ECUM1H391KBN	C.CAPACITOR CH 50V 390P	1	
C3346		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3347		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C3349		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C3350		ECUM1H681KBN	C.CAPACITOR CH 50V 680P	1	
C3351,52		ECUM1H181JCN	C.CAPACITOR CH 50V 180P	2	
C3353		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3354		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3355		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C3356		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3357		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3358		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C3364		ECEA0JKN470	E.CAPACITOR 6.3V 47U	1	
C3365		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C3366		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C3371		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C3372		ECEA1EK3R3	E.CAPACITOR 25V 3.3U	1	
C3382		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3801		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C3802		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C3804		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3805,06		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3807		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3808,09		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3810		ECEA1HK3R3	E.CAPACITOR 50V 3.3U	1	
C3811,12		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3813		ECUM1H471KBN	C.CAPACITOR CH 50V 470P	1	
C3814		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C3815		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3819		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3901,02		ECEA0JK101	E.CAPACITOR 6.3V 100U	2	
C3903		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3904		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3905		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C3906		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C3907		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C3908,09		ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	2	
C3910		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3911,12		ECEA0JK101	E.CAPACITOR 6.3V 100U	2	
C3913		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C3914		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C3923-25		ECEA0JK101	E.CAPACITOR 6.3V 100U	3	
C4001		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C4002,03		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C4005		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4006		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C4007		ECEA16M33	E.CAPACITOR 16V 33U	1	
C4008		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C4009		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4010		ECQP1222JZ	P.CAPACITOR 0.0022U	1	
C4011		ECCD2H181J	C.CAPACITOR 500V 180P	1	
C4013		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C4014,15		ECEA1CK100	E.CAPACITOR 16V 10U	2	
C4016		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C4017		ECUM1H471KBN	C.CAPACITOR CH 50V 470P	1	
C4018		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4019		ECUM1H222JUN	C.CAPACITOR CH 50V 2200P	1	
C4020,21		ECUM1H224ZFM	C.CAPACITOR CH 50V 0.22U	2	
C4023		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C4024		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C4501		ECQB1H152JH	P.CAPACITOR 50V 1500P	1	
C4502		ECUM1C104ZFN	C.CAPACITOR CH 16V 0.1U	1	
C4503		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4504,05		ECEA1CPZ470	E.CAPACITOR 16V 47U	2	
C4506		VCEA1CAH100	E.CAPACITOR 16V 10U	1	
C4507		ECQB1H223JA	P.CAPACITOR 50V 0.022U	1	
C4508		ECEA1EB24R7	E.CAPACITOR 25V 4.7U	1	
C4509		ECEA1APZ470	E.CAPACITOR 10V 47U	1	
C4510		ECQB1H103JA	P.CAPACITOR 50V 0.01U	1	
C4511		ECQB1H332JA	P.CAPACITOR 50V 3300P	1	
C4512		ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4513		ECUM1H681JN	C.CAPACITOR CH 50V 680P	1	
C4514		ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4515		VCEA1EAH4R7	E.CAPACITOR 25V 4.7U	1	
C4517		ECEA1AP2101	E.CAPACITOR 10V 100U	1	
C4518		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C4521		ECUM1C473KBV	C.CAPACITOR CH 16V 0.047U	1	
C4522		VCEA1HAH3R3	E.CAPACITOR 50V 3.3U	1	
C4528		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C4530		ECEA0JPK470	E.CAPACITOR 6.3V 47U	1	
C4533		ECEA1CPZ330	E.CAPACITOR 16V 33U	1	
C4537		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C4538		ECEA1HUR47	E.CAPACITOR 50V 0.47U	1	
C4539		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C4541		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C4545		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4552		ECUM1C104ZFN	C.CAPACITOR CH 16V 0.1U	1	
C4556		VCEA1CAH100	E.CAPACITOR 16V 10U	1	
C4557		ECQB1H223JA	P.CAPACITOR 50V 0.022U	1	
C4558		ECEA1EB24R7	E.CAPACITOR 25V 4.7U	1	
C4559		ECEA1APZ470	E.CAPACITOR 10V 47U	1	
C4560		ECQB1H103JA	P.CAPACITOR 50V 0.01U	1	
C4561		ECQB1H332JA	P.CAPACITOR 50V 3300P	1	
C4562		ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4563		ECUM1H681JN	C.CAPACITOR CH 50V 680P	1	
C4564		ECUM1H561JN	C.CAPACITOR CH 50V 560P	1	
C4565		VCEA1EAH4R7	E.CAPACITOR 25V 4.7U	1	
C4567		ECEA1AP2101	E.CAPACITOR 10V 100U	1	
C4568		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C4572		VCEA1HAH3R3	E.CAPACITOR 50V 3.3U	1	
C4576		ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C4583		ECEA1CPZ330	E.CAPACITOR 16V 33U	1	
C4585,86		ECEA1APZ101	E.CAPACITOR 10V 100U	2	
C4591		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C4592		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4604		ECUM1H182JN	C.CAPACITOR CH 50V 1800P	1	
C4606		VCEA0JAC470	E.CAPACITOR 6.3V 47U	1	
C4611		ECQB1H182JZ	P.CAPACITOR 50V 1800P	1	
C4613		ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
C4616		ECUX1H102ZFV	C.CAPACITOR CH 50V 1000P	1	
C4617		ECEA1OM22	E.CAPACITOR 10V 22U	1	
C4618		ECQB1H822JH	P.CAPACITOR 50V 8200P	1	
C4619		ECEA1APB100	E.CAPACITOR 10V 10U	1	
C4621		ECEA0JPK101	E.CAPACITOR 6.3V 100U	1	
C4629		ECQB1H562JZ	P.CAPACITOR 50V 5600P	1	
C4636		ECUM1H471JN	C.CAPACITOR CH 50V 470P	1	
C4638		ECQB1H822JH	P.CAPACITOR 50V 8200P	1	
C4651		ECQB1H333JA	P.CAPACITOR 50V 0.033U	1	
C4652,53		ECUM1C105ZFN	C.CAPACITOR 16V 1U	2	
C4901-04		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	4	
C4908-10		VCEA1CAD100	E.CAPACITOR 16V 10U	3	
C4912		VCEA0JAC101	E.CAPACITOR 6.3V 100U	1	
C4913		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C4914		ECQB1H332JH	P.CAPACITOR 50V 0.27U	1	
C4915		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C4916		ECQB1H332JH	P.CAPACITOR 50V 0.27U	1	
C4917		VCEA1CAD100	E.CAPACITOR 16V 10U	1	
C4918		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C4919		ECQB1H332JH	P.CAPACITOR 50V 0.27U	1	
C4920		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C4921		ECQB1H332JH	P.CAPACITOR 50V 0.27U	1	
C4922		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C4923,24		ECQB1H332JH	P.CAPACITOR 50V 0.27U	2	
C4925		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C4926		VCEA0JAC101	E.CAPACITOR 6.3V 100U	1	
C4927,28		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	2	
C6001		ECEA0JK330	E.CAPACITOR 6.3V 33U	1	
C6002		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6003,04		ECEA0JK470	E.CAPACITOR 6.3V 47U	2	
C6005		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C6006		ECQB1H392JH	P.CAPACITOR 50V 3900P	1	
C6007		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C6009,10		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	2	
C6014		ECEA0JM331	E.CAPACITOR 6.3V 330U	1	
C6015		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C6016		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6017		ECA1CM222	E.CAPACITOR 16V 2200U	1	
C6018		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C6019		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C6020,21		ECUM1H104ZFN	C.CAPACITOR 50V	2	
C6022,23		ECUM1H271JCN	C.CAPACITOR CH 50V 270P	2	
C6024		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C6025		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C6101		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C6102		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C6103		ECA0JM221	E.CAPACITOR 6.3V 220U	1	
C6302		EECS5R5V105	TRIMMER	1	
C7302		ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C7303		ECQV1H393JZ	P.CAPACITOR 50V 0.039U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C7304	ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C7305	ECQV1H473JZ	P.CAPACITOR 50V 0.047U	1	
C7306	ECQB1H102KZ	P.CAPACITOR 50V 1000P	1	
C7307	ECQB1HB22KZ	P.CAPACITOR 50V 8200P	1	
C7308	ECQB1H102KZ	P.CAPACITOR 50V 1000P	1	
C7309	ECQB1H152JH	P.CAPACITOR 50V 1500P	1	
C7310	ECEA16M10	E.CAPACITOR 16V	1	
C7311	ECEA50MR47	E.CAPACITOR	1	
C7312	ECQV1H224JZ	P.CAPACITOR 50V 0.22U	1	
C7313	ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C7314	ECQV1H224JZ	P.CAPACITOR 50V 0.22U	1	
C7315	ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C7316	ECQV1H224JZ	P.CAPACITOR 50V 0.22U	1	
C7317	ECEA1CK101	E.CAPACITOR 16V 100U	1	
C7318	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7319	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7320,21	ECEA1CK100	E.CAPACITOR 16V 10U	2	
C7323,24	ECQV1H393JZ	P.CAPACITOR 50V 0.039U	2	
C7331	ECQV1H474JZ	P.CAPACITOR 50V 0.47U	1	
C7332,33	ECUM1H102ZFN	C.CAPACITOR CH 50V 1000P	2	
C7334	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7335	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7336	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7337	ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C7339	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7340	ECUM1H390JPN	C.CAPACITOR CH 50V 39P	1	
C7341	ECUM1H070DCN	C.CAPACITOR CH 50V 7P	1	
C7342	ECQV1H823JZ	P.CAPACITOR 50V 0.082U	1	
C7343	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7345	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7346	ECUM1H390JPN	C.CAPACITOR CH 50V 39P	1	
C7347	ECUM1H070DCN	C.CAPACITOR CH 50V 7P	1	
C7348	ECQV1H393JZ	P.CAPACITOR 50V 0.039U	1	
C7349,50	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	2	
C7351,52	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7353	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7401	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7402,03	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7404	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7405,06	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7407	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C7408	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7409	ECUM1H104ZFN	C.CAPACITOR 50V	1	
C7651	ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C7653	ECQB1H332JH	P.CAPACITOR 50V 0.27U	1	
C7668	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7685	ECEA1HK010	E.CAPACITOR 50V 1U	1	
C7801	ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C7815	VCYE1C104MR1	S.CAPACITOR 16V 0.1U	1	
C7816	ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C7821	ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C7822	ECQB1H333JH	P.CAPACITOR 50V 0.033U	1	
C7823	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C7851	ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C7852	ECEA1CK101	E.CAPACITOR 16V 100U	1	
C7853,54	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	2	
C7855,56	ECEA1HK010	E.CAPACITOR 50V 1U	2	
C7860	ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
		DIODES		
D301	MA723VT	DIODE	1	(VT)
D302	MA4091M	DIODE	1	
D303	1SS254	DIODE	1	
D304	MA151K	DIODE	1	
D710	MA3100L	DIODE	1	
D801	1SS254	DIODE	1	
D802	MA151WK	DIODE	1	
D803	MA151WK	DIODE	1	
D805	1ss254	DIODE	1	
D806	MA723VT	DIODE	1	(VT)
D807	1SS254	DIODE	1	
D808	MA151WA	DIODE	1	
D811-14	1SS254	DIODE	4	
D1005,06	1SS254	DIODE	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
D1701	SB05-05CP	DIODE	1	
D1702	MA4300H	DIODE	1	
D1703	MA185	DIODE	1	
D2002	1SS254	DIODE	1	
D2501	1SS254	DIODE	1	
D2503-10	1SS254	DIODE	8	
D2511	AK04	DIODE	1	
D2512	MA723VT	DIODE	1	(VT)
D2515	1SS254	DIODE	1	
D3004	1SS254	DIODE	1	
D3006	MA723VT	DIODE	1	(VT)
D3007	1SS254	DIODE	1	
D3010	1SS254	DIODE	1	
D3011	MA723VT	DIODE	1	(VT)
D3012	1SS254	DIODE	1	
D3301,02	1SS254	DIODE	2	
D3304	MA723VT	DIODE	1	(VT)
D3305	1SS254	DIODE	1	
D3901	MA4056M	DIODE	1	
D3902-04	1SS254	DIODE	3	
D4005	1SS254	DIODE	1	
D4501,02	MA151K	DIODE	2	
D4503	MA151K	DIODE	1	
D4504	MA151K	DIODE	1	
D4601,02	MA151K	DIODE	2	
D6001	MA723VT	DIODE	1	(VT)
D6002	AK04	DIODE	1	
D6003,04	MA723VT	DIODE	2	(VT)
D6005,06	1SS254	DIODE	2	
D6007	ERA15-01	DIODE	1	
D6008	AK04	DIODE	1	
D6009-15	1SS254	DIODE	7	
D6101,02	MA156	DIODE	2	
D6105	AK04	DIODE	1	
D6106-09	1SS254	DIODE	4	
D7303	MA28WA	DIODE	1	
D7304	MA3100L	DIODE	1	
D7401	MA723VT	DIODE	1	(VT)
D7403-06	1SS254	DIODE	4	
D7408	MA29W-A	DIODE	1	
D7672,73	MA3150-H	DIODE	2	
D7851	1SS254	DIODE	1	
		DELAY LINES		
DL801	VLD0147	DELAY LINE	1	
DL802	EFDVR645A45A	DELAY LINE	1	
DL3801	EFDUN124A13N	DELAY	1	
		CONNECTORS		
FG	VJS1231R	CONNECTOR (FEMALE)	1	
		FILTERS		
FL301	VLF0639	FILTER	1	
FL302	ELB4M022	FILTER	1	
FL303	VLF0727	FILTER	1	
FL801	ELB4W002	FILTER	1	
FL3001	VLF0413	FILTER	1	
FL3301	ELB4R031	FILTER	1	
FL3302	VLF0766	FILTER	1	
FL3303	VLF0765	FILTER	1	
FL4501	VLF0947	FILTER	1	
		INTEGRATED CIRCUITS		
IC301	VEFH20B	IC	1	
IC302	MSM6965-3RS	IC	1	
IC701	M51366SP	IC	1	
IC801	VCR0284	IC	1	
IC802	NJM2233BMA	IC	1	
IC803	M52063SP	IC	1	
IC2001	AN3727S	IC	1	
IC2002	UPC358G2	IC	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC2003	MN4066BS	IC	1	
IC2501	BA6435S	IC	1	
IC2502	UPC358G2	IC	1	
IC2503	SI-3090CLF	IC	1	
IC2504	TPIC0130N	IC	1	
IC3001,02	NJM2233BMA	IC	2	
IC3003	M52055FP	IC	1	
IC3004	AN3581S	IC	1	
IC3301	M52083FP	IC	1	
IC3302	AN6308S	IC	1	
IC3801	AN34978B	IC	1	
IC3901	M52474P	IC	1	
IC3902	BA7004	IC	1	
IC4001	RC4565DD	IC	1	
IC4501	BH7770KS	IC	1	
IC4601	BA7755AF	IC	1	
IC4901	LA7155M	IC	1	
IC6001	MN67431VREQ	IC	1	
IC6002	MC14519BF	IC	1	
IC6003	BU5863F	IC	1	
IC6004	MN1280S	IC	1	(S)
IC7301	TDA3803A	IC	1	
IC7302	TA8721SN	IC	1	
IC7401	M66006FP	IC	1	
IC7851	MN158413VSSY	IC	1	
IC7852	MN1280S	IC	1	(S)
IC7853	SDA5642	IC	1	
		CONNECTORS		
J3951.52	VJS1470	CONNECTOR(FEMALE)	2	
L303	ELESQ101KA	COIL 100UH	1	
L304	VLQ0407101K	COIL 100UH	1	
L305,06	ELESQ101KA	COIL 100UH	2	
L308	ELESP180JA	COIL 18UH	1	
L701	ELESP680KA	COIL 68UH	1	
L711	ELQTR22XB	COIL 0.22UH	1	
L714	VLQ0305J1R2	COIL 1.2UH	1	
L715	VLQ0213K680	COIL 68UH	1	
L716	ELESP560KA	COIL 56UH	1	
L717,18	ELESP680KA	COIL 68UH	2	
L719	ELESP120KA	COIL 1000UH	1	
L781	ELESP680KA	COIL 68UH	1	
L803,04	ELESQ101KA	COIL 100UH	2	
L805	VLQ0188J330	COIL 33UH	1	
L806,07	ELESQ681KA	COIL 680UH	2	
L808	ELESQ331KA	COIL 330UH	1	
L809	VLQ0188J470	COIL 47UH	1	
L810	VLQ0407101K	COIL 100UH	1	
L811-13	VLQ0188J150	COIL 15UH	3	
L814	VLQ0188J330	COIL 33UH	1	
L815	ELESQ101KA	COIL 100UH	1	
L2001	ELESQ101KA	COIL 100UH	1	
L2002	VLP0099	COIL	1	
L2003	VLQ0569	COIL	1	
L2004	VLQ0552	COIL	1	
L2501	ELESP102KA	COIL 1000UH	1	
L2502,03	ELESQ101KA	COIL 100UH	2	
L2505	VLQ0558K331	COIL 330UH	1	
L2506	ELC07B009	COIL	1	
L3001-03	ELESQ101KA	COIL 100UH	3	
L3005	ELESQ101KA	COIL 100UH	1	
L3006	VLQ0398	COIL	1	
L3007	ELESQ101KA	COIL 100UH	1	
L3008-11	VLQ0556	COIL	4	
L3301	VLQ0188J150	COIL 15UH	1	
L3303	VLQ0188J101	COIL 100UH	1	
L3306	VLQ0188J390	COIL 39UH	1	
L3307	VLQ0188J120	COIL 12UH	1	
L3308	VLQ0188J330	COIL 33UH	1	
L3309	VLQ0188J181	COIL 180UH	1	
L3310	VLQ0188J270	COIL 27UH	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
L3311	VLQ0188J820	COIL 82UH	1	
L3312	VLQ0188J151	COIL 150UH	1	
L3313	ELESQ681KA	COIL 680UH	1	
L3314	VLQ0188J101	COIL 100UH	1	
L3315,16	VLQ0188J5R6	COIL 5.6UH	2	
L3317	VLQ0188J120	COIL 12UH	1	
L3318	ELESQ101KA	COIL 100UH	1	
L3322,23	ELESQ101KA	COIL 100UH	2	
L3801	ELESQ101KA	COIL 100UH	1	
L3802,03	VLQ0188J150	COIL 15UH	2	
L3804	VLQ0188J151	COIL 150UH	1	
L3805	VLQ0188J270	COIL 27UH	1	
L3901-03	ELESQ101KA	COIL 100UH	3	
L4001	ELESP471KA	COIL 470UH	1	
L4002,03	ELESQ101KA	COIL 100UH	2	
L4501,02	ELESQ101KA	COIL 100UH	2	
L4601	VLQEL07F153J	COIL 15MH	1	
L4901	ELESP102KA	COIL 1000UH	1	
L4902,03	ELESQ101KA	COIL 100UH	2	
L4904-06	ELESP102KA	COIL 1000UH	3	
L4907-10	ELESQ101KA	COIL 100UH	4	
L4911,12	ELESP102KA	COIL 1000UH	2	
L6001	VLP0074	COIL	1	
L7301	ELESP102KA	COIL 1000UH	1	
L7401-03	ELESQ101KA	COIL 100UH	3	
		CONNECTORS		
P001	VJS1738	CONNECTOR (FEMALE)	1	
P501	VJS1238T	CONNECTOR (FEMALE)	1	
P501	VJS1743	CONNECTOR (FEMALE)	1	
P551	VJS1741	CONNECTOR (FEMALE)	1	
P1001	VJP2593	CONNECTOR (MALE)	1	
P1001	VJS2593	CONNECTOR (FEMALE)	1	
P1101	VJS1932T	CONNECTOR (FEMALE)	1	
P1103	VJS1142	CONNECTOR (FEMALE)	1	
P1502	VJS1141	CONNECTOR (FEMALE)	1	
P2002	VJP1232T	CONNECTOR (MALE) 5P	1	
P2002	VJS1738	CONNECTOR (FEMALE)	1	
P2003	VJP1229T	CONNECTOR (MALE) 2P	1	
P2501	VJS3193B015A	CONNECTOR (FEMALE)	1	
P2502	VJP1244T	CONNECTOR (MALE) 4P	1	
P2502	VJS1231R	CONNECTOR (FEMALE)	1	
P3001	VJP3078	CONNECTOR (MALE)	1	
P3001	VJS1743	CONNECTOR (FEMALE)	1	
P3001	VJS3078	CONNECTOR (FEMALE)	1	
P3003	VJP1235T	CONNECTOR (MALE) 8P	1	
P3003	VJS1235T	CONNECTOR (FEMALE)	1	
P3007	VJP1229T	CONNECTOR (MALE) 2P	1	
P3007	VJS1735	CONNECTOR (FEMALE)	1	
P3301	VJP1229T	CONNECTOR (MALE) 2P	1	
P3301	VJS1735	CONNECTOR (FEMALE)	1	
P3991	VJS1235T	CONNECTOR (FEMALE)	1	
P4001	VJP3103	CONNECTOR (MALE)	1	
P4002	VJP1235T	CONNECTOR (MALE) 8P	1	
P4002	VJS1741	CONNECTOR (FEMALE)	1	
P4003	VJP1229T	CONNECTOR (MALE) 2P	1	
P4003	VJS1229T	CONNECTOR (FEMALE)	1	
P4004	VJP3079	CONNECTOR (MALE)	1	
P4004	VJS3079	CONNECTOR (FEMALE)	1	
P6001	VJS3193A015A	CONNECTOR (FEMALE)	1	
P6004	VJS2571A004	CONNECTOR (FEMALE)	1	
P6501	VJS1744	CONNECTOR (FEMALE)	1	
P6502	VJS3079	CONNECTOR (FEMALE)	1	
P7403	VJS1744	CONNECTOR (FEMALE)	1	
P7501	VJS3193A016A	CONNECTOR (FEMALE)	1	
P7502	VJS1455	CONNECTOR (FEMALE)	1	
P7503	VJP3079	CONNECTOR (MALE)	1	
PK3021-24	VJR0190	PACK PIN	4	
PP2501	VJP3043G010W	CONNECTOR (MALE)	1	
PP2502	VJP3043G008W	CONNECTOR (MALE)	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
PP2503	VJP3043G012W	CONNECTOR (MALE)	1	
PP3001	VJP3044G009W	CONNECTOR (MALE)	1	
PP3002,03	VJP3044G012W	CONNECTOR (MALE)	2	
PP3011,12	VJP3042A018W	CONNECTOR (MALE)	2	
PP4001-03	VJP3186A018	CONNECTOR (MALE)	3	
PP7401-03	VJP3043A005W	CONNECTOR (MALE)	3	
PP7404	VJP3043A006W	CONNECTOR (MALE)	1	
PP7705	VJP3043A004W	CONNECTOR (MALE)	1	
PS701-03	VJS3043B005W	CONNECTOR (FEMALE)	3	
PS704	VJS3043B006W	CONNECTOR (FEMALE)	1	
PS2501	VJS3043B010W	CONNECTOR (FEMALE)	1	
PS2502	VJS3043F008W	CONNECTOR (FEMALE)	1	
PS2503	VJS3043F012W	CONNECTOR (FEMALE)	1	
PS3001	VJS3044F009W	CONNECTOR (FEMALE)	1	
PS3002,03	VJS3044F012W	CONNECTOR (FEMALE)	2	
PS3011,12	VJS3042F018W	CONNECTOR (FEMALE)	2	
PS4001-03	VJS3186B018	CONNECTOR (FEMALE)	3	
PS7301,02	VJR0477	PACK PIN	2	
		TRANSISTORS		
Q301-03	MSC2295	TRANSISTOR	3	
Q703	MSD601-S	TRANSISTOR	1	
Q712	2SD1992	TRANSISTOR	1	
Q771	MSD601-S	TRANSISTOR	1	
Q801	MSB709	TRANSISTOR	1	
Q802	MSD601	TRANSISTOR	1	
Q804	MSB709	TRANSISTOR	1	
Q1001	2SD1996	TRANSISTOR	1	
Q1701	2SD1994-S	TRANSISTOR	1	
Q2001	2SD1915F	TRANSISTOR	1	
Q2002	MSB709	TRANSISTOR	1	
Q2003	MSD601	TRANSISTOR	1	
Q2501	2SB772	TRANSISTOR	1	
Q3001,02	MSD601	TRANSISTOR	2	
Q3003	2SD1328	TRANSISTOR CHIP	1	
Q3004,05	MSC2295	TRANSISTOR	2	
Q3006	MSB709	TRANSISTOR	1	
Q3007	MSD601	TRANSISTOR	1	
Q3301,02	MSC2295	TRANSISTOR	2	
Q3304,05	MSD601	TRANSISTOR	2	
Q3306	MSB709	TRANSISTOR	1	
Q3307,08	MSC2295	TRANSISTOR	2	
Q3309	MSD601	TRANSISTOR	1	
Q3315,16	MSC2295	TRANSISTOR	2	
Q3317	MSD601	TRANSISTOR	1	
Q3801	MSD601	TRANSISTOR	1	
Q3804	MSC2295	TRANSISTOR	1	
Q3805	MSB709	TRANSISTOR	1	
Q3901	MSD601	TRANSISTOR	1	
Q3902	2SB1320	TRANSISTOR	1	
Q3903	MSD601	TRANSISTOR	1	
Q3904	MSB709	TRANSISTOR	1	
Q3908	2SD1328	TRANSISTOR CHIP	1	
Q3909	MSD601	TRANSISTOR	1	
Q3910	MSB709	TRANSISTOR	1	
Q4002	2SB790	TRANSISTOR	1	
Q4003	MSB709	TRANSISTOR	1	
Q4004	2SB790	TRANSISTOR	1	
Q4005	2SB1321	TRANSISTOR	1	
Q4006	2SD1992A-R	TRANSISTOR	1	(R)
Q4007,08	MSD601	TRANSISTOR	2	
Q4011,12	MSD601	TRANSISTOR	2	
Q4015,16	2SD1328	TRANSISTOR CHIP	2	
Q4501	2SD655	TRANSISTOR	1	
Q4551	2SB561	TRANSISTOR	1	
Q4601,02	MSD1328	TRANSISTOR	2	
Q6001	2SD1991	TRANSISTOR	1	
Q6003	2SD893	TRANSISTOR	1	
Q6004,05	2SD1994-S	TRANSISTOR	2	(S)
Q6006	MSD602	TRANSISTOR	1	
Q6007,08	MSD601	TRANSISTOR	2	
Q6101	MSD601	TRANSISTOR	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
Q6102	MSB709	TRANSISTOR	1	
Q7301	MSD601-S	TRANSISTOR	1	
Q7304,05	MSD601	TRANSISTOR	2	
Q7306	2SC2404-C	TRANSISTOR CHIP	1	(C,D)
Q7307	2SD1328	TRANSISTOR	1	
Q7401	2SB1320	TRANSISTOR	1	
		COMBINATION PARTS		
QR301	MRN2402	TRANSISTOR	1	
QR302	MRN1404	TRANSISTOR	1	
QR304,05	MRN1404	TRANSISTOR	2	
QR306	MRN1402	TRANSISTOR	1	
QR308	MRN1402	TRANSISTOR	1	
QR309	MRN2404	TRANSISTOR	1	
QR310	MRN1404	TRANSISTOR	1	
QR312	MRN1404	TRANSISTOR	1	
QR701,02	MRN1404	TRANSISTOR	2	
QR711,12	MRN1403	TRANSISTOR	2	
QR801	MRN1404	TRANSISTOR	1	
QR802	MRN1407	TRANSISTOR	1	
QR803,04	MRN1402	TRANSISTOR	2	
QR805,06	MRN1404	TRANSISTOR	2	
QR807	MRN1402	TRANSISTOR	1	
QR808	MRN1403	TRANSISTOR	1	
QR809	MRN1404	TRANSISTOR	1	
QR810	MRN2404	TRANSISTOR	1	
QR1001,02	MRN1402	TRANSISTOR	2	
QR2001,02	MRN1403	TRANSISTOR	2	
QR2502	MRN1403	TRANSISTOR	1	
QR2503	MRN1404	TRANSISTOR	1	
QR2504	MRN2404	TRANSISTOR	1	
QR3001	MRN2403	TRANSISTOR-RESISTOR	1	
QR3002-06	MRN1404	TRANSISTOR	5	
QR3008	DTC363EK	TRANSISTOR-RESISTOR	1	
QR3009	MRN2402	TRANSISTOR	1	
QR3010	MRN1402	TRANSISTOR	1	
QR3011	MRN1407	TRANSISTOR	1	
QR3012	MRN2402	TRANSISTOR	1	
QR3013	MRN1402	TRANSISTOR	1	
QR3014	MRN1404	TRANSISTOR	1	
QR3301-04	DTC363EK	COMBI.TR-R	4	
QR3305	MRN2403	TRANSISTOR-RESISTOR	1	
QR3306	DTC363EK	TRANSISTOR-RESISTOR	1	
QR3901	MRN1403	TRANSISTOR	1	
QR3902	MRN1402	TRANSISTOR	1	
QR4001	MRN1404	TRANSISTOR	1	
QR4002	MRN1402	TRANSISTOR	1	
QR4003	MRN1403	TRANSISTOR	1	
QR4004,05	MRN1402	TRANSISTOR	2	
QR4006	MRN1404	TRANSISTOR	1	
QR4007	MRN1403	TRANSISTOR	1	
QR4009,10	MRN1403	TRANSISTOR	2	
QR4012-14	MRN1404	TRANSISTOR	3	
QR4016	MRN1402	TRANSISTOR	1	
QR4017	MRN1404	TRANSISTOR	1	
QR4508,09	MRN2404	TRANSISTOR	2	
QR4510	MRN1403	TRANSISTOR	1	
QR4602	MRN2402	TRANSISTOR	1	
QR4603	MRN1404	TRANSISTOR	1	
QR6001,02	MRN2402	TRANSISTOR	2	
QR6003	MRN1402	TRANSISTOR	1	
QR6004	UN211H	IC	1	
QR6005	MRN2404	TRANSISTOR	1	
QR6006	UN211H	IC	1	
QR6007	MRN2404	TRANSISTOR	1	
QR6008	MRN2402	TRANSISTOR	1	
QR6009,10	MRN1404	TRANSISTOR	2	
QR6012	MRN1402	TRANSISTOR	1	
QR6014	MRN2404	TRANSISTOR	1	
QR6101	MRN1404	TRANSISTOR	1	
QR6102,03	MRN1402	TRANSISTOR	2	
QR6104	MRN1404	TRANSISTOR	1	
QR7301,02	MRN1404	TRANSISTOR	2	
QR7312-14	MRN1402	TRANSISTOR	3	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
QR7315,16	MRN1404	TRANSISTOR	2	
QR7401	MRN1404	TRANSISTOR	1	
QR7402	DTC124TK	TRANSISTOR-RESISTOR	1	
QR7801	MRN2402	TRANSISTOR	1	
QR7802	MRN1404	TRANSISTOR	1	
QR7851	MRN1402	TRANSISTOR	1	
QR7852	MRN1404	TRANSISTOR	1	
		RESISTORS		
R301,02	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R308	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R309	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R310	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R311	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R320,21	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R322	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R323	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R324	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R325	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R326	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R327	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R328	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R329	ERJ6GMYJ181	M.RESISTOR CH 1/10W 180	1	
R330	ERJ6GMYJ911	M.RESISTOR CH 1/10W 910	1	
R331	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R332	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R333	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R334	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R335	ERDS2TJ151	C.RESISTOR 1/4W 150	1	
R336	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R337	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R338	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R340	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R341	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R342	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R343	ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R344	ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R345	ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R716	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R717	ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R718	ERJ6GEYJ754	M.RESISTOR CH 1/10W 750K	1	
R719,20	ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	2	
R721	ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R722	ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R723	ERJ6GEYJ183	M.RESISTOR CH 1/10W 18K	1	
R724	ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R725	ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R726	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R727	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R728	ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R737	ERJ6GEYJ274	M.RESISTOR CH 1/10W 270K	1	
R738	ERJ6GEYJ334	M.RESISTOR CH 1/10W 330K	1	
R740	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R741	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R743	ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R744	ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R745	ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R746	ERDS2TJ181	C.RESISTOR 1/4W 180	1	
R747	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R750	ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R759	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R772	ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R773	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R774	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R781	ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R782	ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R792	ERDS2TJ120	C.RESISTOR 1/4W 12	1	
R802	ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R803	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R804	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R805,06	ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	2	
R807	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R809	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R810	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R811	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R812	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R813	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R814	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R815	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R816	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R817	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R818	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R819	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R820	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R821	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R822	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R823	ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R824	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R825	ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R826	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R831	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R832,33	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R835	ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R836-38	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	3	
R839,40	ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	2	
R841	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R842	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R843	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R844	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R845	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R846	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R847	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R848	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R849,50	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	2	
R851	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R852	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R853	ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R854	ERJ6GEYJ684	M.RESISTOR CH 1/10W 680K	1	
R1002	ERDS2TJ8ZZ	C.RESISTOR 1/4W 8.2K	1	
R1003	ERJ6GMZOR00	M.RESISTOR CH 1/10W 0	1	
R1004	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R1701	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R1702	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R1703	ERJ6GMZOR00	M.RESISTOR CH 1/10W 0	1	
R2001,02	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2003	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2005,06	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2007	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2008,09	ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	2	
R2010	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2011	ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R2012	ERJ6GMYG392	M.RESISTOR CH 1/10W 3.9K	1	
R2013	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2014	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2015	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2016	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2017	ERJ6GMYJ123	M.RESISTOR CH 1/10W 12K	1	
R2018	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2019	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R2020	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R2021	ERJ6GMZOR00	M.RESISTOR CH 1/10W 0	1	
R2022,23	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	2	
R2024	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R2025	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2501	ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R2502	ERJ6GMYG752	M.RESISTOR CH 1/10W 7.5K	1	
R2503	ERJ6GMYG622	M.RESISTOR CH 1/10W 6.2K	1	
R2504	ERJ6GMYG512	M.RESISTOR CH 1/10W 5.1K	1	
R2505	ERJ6GMYG513	M.RESISTOR CH 1/10W 51K	1	
R2507	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2508-10	ERDS2TJ560	C.RESISTOR 1/4W 56	3	
R2511,12	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R2513	ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2514	ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2515	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R2516	ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2517	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R2520	ERDS2TJ681	C.RESISTOR 1/4W 680	1	
R2521	ERDS1TJ681	C.RESISTOR 1/2W 680	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R2522		ERJ6GMYG473	M.RESISTOR CH 1/10W 47K	1	
R2523		ERJ6GMYG123	M.RESISTOR CH 1/10W 12K	1	
R2524		ERJ6GMYG393	M.RESISTOR CH 1/10W 39K	1	
R2525		ERJ6GMYG124	M.RESISTOR CH 1/10W 120K	1	
R2526		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R2528		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R2529		ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R2530		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R2531		ERJ6GMYG392	M.RESISTOR CH 1/10W 3.9K	1	
R2532		ERJ6GMYG473	M.RESISTOR CH 1/10W 47K	1	
R2534		ERSF30JR90	M.RESISTOR 0.9	1	
R2535		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2537		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2538		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R2539		ERJ6GMYJ622	M.RESISTOR CH 1/10W 6.2K	1	
R2540		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2541		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R2542		ERX12SJR47	M.RESISTOR 1/2W 0.47	1	
R2543		ERJ6GMYJ824	M.RESISTOR CH 1/10W 820K	1	
R2544		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3001,02		ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	2	
R3003.04		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R3006		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3007		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3008		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3009		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3010		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R3011		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3012		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3013		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3014		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3015		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3016		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3017		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3018,19		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R3020		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3021		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3022.23		ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	2	
R3024		ERJ6GMYG471	M.RESISTOR CH 1/10W 470	1	
R3025		ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	1	
R3026		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3027		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3028		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3029		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R3030		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3031		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3032		ERJ6GMYG202	M.RESISTOR CH 1/10W 2K	1	
R3033		ERJ6GMYG222	M.RESISTOR CH 1/10W 2.2K	1	
R3034,35		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	2	
R3037		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3038		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3039-42		ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	4	
R3301		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3302		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R3303		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3304		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3305		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3306		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3308		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3310		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3311-13		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	3	
R3320,21		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R3322		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R3323		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R3324		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3325,26		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R3327		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R3328		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3329		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R3330		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3331		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3332		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R3333		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3334		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R3335		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R3336,37		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	2	
R3338		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3339		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3340		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3341		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R3342		ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R3343		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3344-47		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	4	
R3348		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3349		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3350		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3351		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3352		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3353.54		ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	2	
R3355		ERJ6GMYG152	M.RESISTOR CH 1/10W 1.5K	1	
R3356		ERJ6GMYG112	M.REISITOR CH 1/10W 1.1K	1	
R3367		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R3368		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3369		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3370		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3371		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R3375,76		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	2	
R3377		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3378		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3379		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R3380		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3392		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3395		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3396		ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
R3802		ERJ6GM20R00	M.RESISTOR CH 1/10W 0	1	
R3803		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3804		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3806		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R3807		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3809		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3810		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3811		ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R3812		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R3813		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3814		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R3822		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3823		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3824,25		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	2	
R3826		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3901-04		ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	4	
R3905		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R3906		ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R3907		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3908,09		ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	2	
R3910		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R3916		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3917		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R3918		ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	1	
R3919		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3920		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3921		ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R3922		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R3923,24		ERJ6GEYJ151	M.RESISTOR CH 1/10W 150	2	
R3926,27		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	2	
R3928		ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	1	
R3938,39		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R3940		ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	1	
R3941-44		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	4	
R3945,46		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	2	
R3947,48		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R3949		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3950		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3951-53		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	3	
R4001		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R4003,04		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R4005		ERDS2TJ680	C.RESISTOR 1/4W 68	1	
R4006,07		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R4008		ERDS2TJ680	C.RESISTOR 1/4W 68	1	
R4009		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R4010		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4012		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4013		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4014		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4015		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R4018		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4019		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R4022		ERJ6GMVG100	M.RESISTOR CH 1/10W 10	1	
R4025		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4026		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4033		ERJ6GMYJZZ3	M.RESISTOR CH 1/10W ZZK	1	
R4034		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4035		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R4036		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R4037		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4038,39		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R4040		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4041,42		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	2	
R4044		ERJ6GMYG433	M.RESISTOR CH 1/10W 43K	1	
R4045		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R4047		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4048-51		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	4	
R4052		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4053		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4054		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R4055		ERJ6GMYJ123	M.RESISTOR CH 1/10W 12K	1	
R4101		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4102		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R4103		ERJ6GMYG682	M.RESISTOR CH 1/10W 6.8K	1	
R4104		ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4501,02		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R4503		VRE0071E36C	M.RESISTOR	1	
R4504,05		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	2	
R4506,07		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	2	
R4508		ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
R4509		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4510		ERJ6GEYJ621	M.RESISTOR CH 1/10W 620	1	
R4511		ERJ6GEYG303	M.RESISTOR CH 1/10W 30K	1	
R4512		VRE0034E163	M.RESISTOR CH 1/10W 16K	1	
R4513		ERJ3GEYG103	M.RESISTOR CH 1/16W 10K	1	
R4514,15		ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	2	
R4518,19		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
R4522		ERJ6GEYJ225	M.RESISTOR CH 1/10W 2.2M	1	
R4527		VRE0034E333	M.RESISTOR CH 1/10W 33K	1	
R4528		VRE0034E153	M.RESISTOR CH 1/10W 15K	1	
R4529		ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
R4530		ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R4534		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4535		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4539		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4540		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4541		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4542		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4543		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4551,52		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	2	
R4553		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R4554		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R4558		ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
R4561		ERJ6GEYG303	M.RESISTOR CH 1/10W 30K	1	
R4562		VRE0034E10C	M.RESISTOR 1/10W	1	
R4563		ERJ3GEYG272	M.RESISTOR CH 1/16W 2.7K	1	
R4568		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R4569		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R4573		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4577		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4578		VRE0034E473	M.RESISTOR CH 1/10W 47K	1	
R4581		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4583		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R4584		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4585		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4586		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4587,88		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	2	
R4591		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4592		ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	1	
R4593		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4594		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4603		ERJ3GEYG183	M.RESISTOR CH 1/16W 18K	1	
R4606		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4610		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R4611		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R4612		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R4613		ERJ6GEYJ394	M.RESISTOR CH 1/10W 390K	1	
R4615		ERJ6GEYJ133	M.RESISTOR CH 1/10W 13K	1	
R4616		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R4638		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R4649		ERJ3GEYG470	M.RESISTOR 1/16W 47	1	
R4651		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R4652		ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R4653		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R4654		ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R4655		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4656		ERJ6GEYG243	M.RESISTOR CH 1/10W 24K	1	
R4657		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R4666		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R4901		ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R4902		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4903		ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R4904		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4905		ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R4906		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4907		ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R4908		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4909,10		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	2	
R4911		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4912		ERJ6GEYG163	M.RESISTOR CH 1/10W 16K	1	
R4913,14		ERJ6GEYG433	M.RESISTOR CH 1/10W 43K	2	
R4915		ERJ6GEYG163	M.RESISTOR CH 1/10W 16K	1	
R4916		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4917-20		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	4	
R4921		ERJ6GEYG303	M.RESISTOR CH 1/10W 30K	1	
R4922,23		ERJ6GEYG243	M.RESISTOR CH 1/10W 24K	2	
R4924		ERJ6GEYG303	M.RESISTOR CH 1/10W 30K	1	
R4925,26		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	2	
R6001		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R6002		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6003		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R6004		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R6005		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R6006,07		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	2	
R6008-10		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	3	
R6011		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R6012		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6013		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6014-20		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	7	
R6021		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R6022		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R6023		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R6027		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R6028		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R6029		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R6030		ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R6031		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R6032		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R6033		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R6034		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R6035		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R6036		ERJ6GEYGZ01	M.RESISTOR CH 1/10W 200	1	
R6037		ERG2SJ150	M.RESISTOR 2W 15	1	
R6038		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6039		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R6040		ERD2FCG220	C.RESISTOR 2W 22	1	<!>
R6041		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R6043,44		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	2	
R6045		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R6046		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6047		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R6048,49		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R6050,51		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R6052		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R6053		ERJ6GMYJ184	M.RESISTOR CH 1/10W 180K	1	
R6054		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R6055		ERJ6GMYJ181	M.RESISTOR CH 1/10W 180	1	
R6057		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6058		ERJ6GEYG131	M.RESISTOR CH 1/10W 130	1	
R6059		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R6060,61		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R6062		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R6063		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6064		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R6101		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R6102,03		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R6104,05		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R6108,09		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	2	
R6110		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R6111		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R6305		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R7302		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R7303		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R7304		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R7305		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R7306		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R7307		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R7308		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R7309		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R7310		ERJ6GEYJ474	M.RESISTOR CH 1/10W 470K	1	
R7311		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R7312		ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	1	
R7313		ERJ6GEYJ824	M.RESISTOR CH 1/10W 820K	1	
R7314,15		ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	2	
R7316		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R7317		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	1	
R7318		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R7321		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7322		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7323		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7324,25		ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	2	
R7329		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7330		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7334-37		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	4	
R7338		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R7339		ERJ6GEYJ330	M.RESISTOR CH 1/10W 33	1	
R7340		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R7341		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R7342		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7345		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R7346		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R7347		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R7348		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R7349		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7351-53		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	3	
R7354,55		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R7401		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7402		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R7403		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R7405-13		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	9	
R7416,17		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R7419		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7420,21		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R7422-24		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	3	
R7656		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R7676		ERG1SJ152	M.RESISTOR 1W 1.5K	1	
R7801		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R7802		ERJ6GEYJ824	M.RESISTOR CH 1/10W 820K	1	
R7803,04		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R7805		ERJ6GEYJ824	M.RESISTOR CH 1/10W 820K	1	
R7806		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R7807		ERJ6GEYG512	M.RESISTOR CH 1/10W 5.1K	1	
R7808		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R7821		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R7822		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R7851		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7860		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
			SWITCHES		
SW3901		VSS0157	SWITCH	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
			TRANSFORMERS		
T703		EIV5EC013A	TRANSFORMER	1	
T704		EIV5EC006A1	TRANSFORMER	1	
T1701		VLT0683	TRANSFORMER	1	
T4001		EIQ7QF013Q	TRANSFORMER	1	
T7301		EIR7QG001B	IF TRANSFORMER	1	
T7302,03		EIL7QH012Q	TRANSFORMER	2	
T7304		EIS5EC007A	TRANSFORMER	1	
T7305		EIS5EC005A	TRANSFORMER	1	
			VARIABLE RESISTORS		
VR301		EVN32CA00B23	V.RESISTOR 2K	1	
VR302,03		EVN32CA00B13	V.RESISTOR 1K	2	
VR304		EVMF6SA00B23	V.RESISTOR 2K	1	
VR701,02		EVTF6SA00B23	V.RESISTOR 2K	2	
VR741		EVNDXAA00B14	V.RESISTOR 10K	1	
VR801		EVND1AA00B14	V.RESISTOR 10K	1	
VR802		EVMF6SA00B14	V.RESISTOR 10K	1	
VR2001		EVNDXAA00B54	V.RESISTOR 50K	1	
VR2006		EVNDXAA00B15	V.RESISTOR 100K	1	
VR2011		EVNDXAA00B15	V.RESISTOR 100K	1	
VR2018,19		EVNDXAA00B15	V.RESISTOR 100K	2	
VR3001-03		EVNDXAA00B23	V.RESISTOR 2K	3	
VR3004		EVMEASA01B54	V.RESISTOR	1	
VR3301		EVMF6SA00B24	V.RESISTOR 20K	1	
VR3302		EVN32CA00B54	V.RESISTOR 50K	1	
VR3304,05		EVN32CA00B52	V.RESISTOR 500	2	
VR3801		EVMF6SA00B13	V.RESISTOR	1	
VR3802		EVMF6SA00B23	V.RESISTOR 2K	1	
VR4001		EVNDXAA00B25	V.RESISTOR 200K	1	
VR4501		EVMF1SA00B53	V.RESISTOR	1	
VR4502		EVMF6SA00B24	V.RESISTOR 20K	1	
VR4507		EVMF6SA00B24	V.RESISTOR 20K	1	
VR4509		EVMF1SA00BY3	V.RESISTOR	1	
VR4512		EVNDXAA00B52	V.RESISTOR 500	1	
VR4550		EVMF1SA00BS3	V.RESISTOR	1	
VR4551,52		EVMF6SA00B55	V.RESISTOR	2	
VR7301		EVMF6SA00B14	V.RESISTOR 10K	1	
VR7326		EVMF6SA00B52	V.RESISTOR	1	
VR7328		EVMF6SA00B5Z	V.RESISTOR	1	
VR7340		EVNE4AA00B14	V.RESISTOR 10K	1	
VR7342		EVNE4AA00B53	V.RESISTOR 5K	1	
VR7344		EVNE4AA00B14	V.RESISTOR 10K	1	
			CRYSTAL OSCILLATORS		
X301		VSX0225	CRYSTAL OSCILLATOR	1	
X710		EFCH38MGP1	CRYSTAL OSCILLATOR	1	
X711		VLF0638	CRYSTAL OSCILLATOR	1	
X716,17		EFCA40R40M1	FILTER	2	
X801		VSX0406	CRYSTAL OSCILLATOR	1	
X3901		VSX0099	CRYSTAL OSCILLATOR	1	
X6001		VSX0415	CRYSTAL OSCILLATOR	1	
X6002		VSX0258	CRYSTAL OSCILLATOR	1	
X6003		VSQ0565	CRYSTAL OSCILLATOR	1	
X7301,02		EFCS5R5MS5B	CRYSTAL OSCILLATOR	2	
X7303,04		EFCS5R74MS5B	CRYSTAL OSCILLATOR	2	
X7305		ELB5A016	FILTER	1	
X7851		EFOA4ROM03C2	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		VJF0442	CLAMPER	1	
		VJF0004	CLAMPER	1	
		VJF0309	CLAMPER	1	
		VJH0650	JACK PLATE	1	
		ENC17984	RF CONVERTER	1	<1>
		VWJ160W210BB	FLEXIBLE CADE	1	
		VWJ180W150BB	FLEXIBLE CADE	1	
		VWJ04NB080QQ	FLEXIBLE CADE	1	
		VME1352	HEAT SINK COVER	1	FOR SERVO C.B.A.
		VEJ1230	JACK PLATE	1	FOR INPUT/OUTPUT

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		VGU2707	EDIT KNOB	4	FOR INPUT/OUTPUT
		VJR0189	PACK PIN 10P	1	FOR VPS C.B.A.
		ENV57884H6	TUNER	1	<!> FOR TV DEMO.
		VSC3242	SHIELD COVER (MAIN)	1	FOR TV DEMO. C.B.A.
		VSC3241	SHIELD COVER (TOP)	1	FOR TV DEMO. C.B.A.
		VSC2714	SHIELD COVER (BOTTOM)	1	FOR TV DEMO. C.B.A.
	■	VEP05170F	HEAD AMP C.B.A.		(NLA)
			CAPACITORS		
C501,02		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	2	
C503		ECUM1C105ZFN	C.CAPACITOR 16V 1U	1	
C504-06		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C508		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C509		ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	1	
C510,11		ECUM1H104ZFN	C.CAPACITOR 50V	2	
C512		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C513		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C514		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C515,16		ECUM1C474ZFN	C.CAPACITOR 16V 0.47U	2	
C517,18		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C519,20		ECUM1C474ZFN	C.CAPACITOR 16V 0.47U	2	
C521		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C522		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C524		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C526		VCEA0JAC221	E.CAPACITOR 6.3V 220U	1	
C531		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C532		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C533,34		ECUM1H121JCN	C.CAPACITOR CH 50V 120P	2	
C535		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C536		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C537		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C538,39		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	2	
C540		ECEA1CK220	E.CAPACITOR 16V 22U	1	
C551		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C552-54		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C555		ECEA0JPK221	E.CAPACITOR 6.3V 220U	1	
C556,57		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C558		ECEA0JPK470	E.CAPACITOR 6.3V 47U	1	
C559		ECUM1C105ZFN	C.CAPACITOR 16V 1U	1	
C560,61		ECUM1H471KBN	C.CAPACITOR CH 50V 470P	2	
C562,63		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	2	
C564		ECUM1C105ZFN	C.CAPACITOR 16V 1U	1	
C565		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C566		ECUM1H104ZFN	C.CAPACITOR 50V	1	
			INTEGRATED CIRCUITS		
IC501		AN3337NSB	IC	1	
IC502		AN3370K	IC	1	
IC551		BA7743FS	IC	1	
			COILS		
L501-03		VLQ0540K330	COIL 33UH	3	
L504		VLQ0540J4R7	COIL 4.7UH	1	
L551,52		VLQ0540K330	COIL 33UH	2	
			CONNECTORS		
P501		VJP1251T	CONNECTOR (MALE) 11P	1	
P502		VJS2603	CONNECTOR (FEMALE)	1	
P551		VJP1248T	CONNECTOR (MALE) 8P	1	
			TRANSISTORS		
Q501		MSB709	TRANSISTOR	1	
Q502		MSD601	TRANSISTOR	1	
			RESISTORS		
R501		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R502		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R504		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R505		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R506		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R507		ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R508		ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
R509-12		ERJ6GMYJ330	M.RESISTOR CH 1/10W 33	4	
R517		ERJ6GMYJ100	M.RESISTOR CH 1/10W 10	1	
R518,19		ERJ6GMYJ560	M.RESISTOR CH 1/10W 56	2	
R520		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R521,22		ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	2	
R523		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R524		VRE0034E182	M.RESISTOR CH 1/10W 1.8K	1	
R525		VRE0034E682	M.RESISTOR CH 1/10W 6.8K	1	
R526,27		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
R529		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R551		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R552		ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R553		ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R554		ERJ6GMYJ243	M.RESISTOR CH 1/10W 24K	1	
R556		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R557		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R558		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R559,60		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	2	
R561		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R562		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R563		VRE0034E100	M.RESISTOR CH 1/10W 10	1	
R564		ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R565		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R566		ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R567		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
			MISCELLANEOUS		
		VSC3477	SHIELD COVER (TOP)	1	
		VSC3478	SHIELD COVER (MAIN)	1	
		VSC3479	SHIELD COVER (BOTTOM)	1	
	■	VEP06779A	VR C.B.A.		(NLA)
			CAPACITORS		
C6301,02		ECQB1H103KH	P.CAPACITOR 50V 0.01U	2	
C6501,02		ECQV1H223JS	P.CAPACITOR 50V 0.022U	2	
C6503		ECQV1H124JS	P.CAPACITOR 50V 0.12U	1	
C6504		ECEA1EKS3R3	E.CAPACITOR 25V 3.3U	1	
C6505		ECEA1AKS330	E.CAPACITOR 10V 33U	1	
C6506		ECEA1CKS330	E.CAPACITOR 16V 33U	1	
C6507,08		ECKF1H1032F	C.CAPACITOR 50V 0.01U	2	
C6509		ECQV1H124JS	P.CAPACITOR 50V 0.12U	1	
C6510		VCEA1HAC3R3	E.CAPACITOR 50V 3.3U	1	
			DIODES		
D6501		LN81RCPHLULS	DIODE	1	
			INTEGRATED CIRCUITS		
IC6501		VCR0172	IC	1	
			CONNECTORS		
J6301		VJJ0192	CONNECTOR	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
J6302		VJJ0210	CONNECTOR	1	
			COILS		
L6301,02		VLQ0188J221	COIL 220UH	2	
L6501,02		ELESP471KA	COIL 470UH	2	
			CONNECTORS		
P6501,02		VJP3091	CONNECTOR (MALE)	2	
P6503		VJS2357A015	CONNECTOR (FEMALE)	1	
			RESISTORS		
R6501		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R6502		ERDS2TJ271	C.RESISTOR 1/4W 270	1	
R6503,04		ERQS2CKG2700	M.RESISTOR 1/4W 270	2	
R6505		ERQS2CKG3301	M.RESISTOR 1/4W 3.3K	1	
R6506,07		ERQS2CKG3300	M.RESISTOR 1/4W 330	2	
R6508		ERQS2CKG3301	M.RESISTOR 1/4W 3.3K	1	
R6509,10		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	2	
			SWITCHES		
SW6501		EVQ11407K	SWITCH	1	
			VARIABLE RESISTORS		
VR3004		EWAKPMXB3B24	V.RESISTOR 20K	1	
VR6501		EWAKABXB3C23	V.RESISTOR 2K	1	
VR6503		EWANYJX0554J	V.RESISTOR	1	
			MISCELLANEOUS		
		KL04	LED SPACER	1	
		VYC0160	REC RV PANEL UNIT	1	
		VGU4495	REC VR KNOB	2	
		VJP0691	JACK HOLDER	1	
	■	VEP07654A	TIMER C.B.A.		(NLA)NV-FSZ00EG
			CAPACITORS		
C7501		ECEA1HKS100	E.CAPACITOR 50V 10U	1	
C7502,03		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7504		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C7505		ECEA0JKS330	E.CAPACITOR 6.3V 33U	1	
C7506		ECUM1H223ZFN	C.CAPACITOR CH 50V 0.022U	1	
C7507		ECEA1EKS4R7	E.CAPACITOR 25V 4.7U	1	
C7508		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C7509		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C7510		ECUM1H050CCN	C.CAPACITOR CH 50V 5P	1	
C7511		ECRHA030E41	TRIMMER 3P	1	
C7512		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C7513		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C7514		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C7515		ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
C7516		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C7517		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C7519		ECEA0JKS470	E.CAPACITOR 6.3V 47U	1	
C7520		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C7521		ECEA0JKS470	E.CAPACITOR 6.3V 47U	1	
C7523-36		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	14	
C7537,38		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7539,40		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	2	
C7541		ECEA1EKS4R7	E.CAPACITOR 25V 4.7U	1	
C7542,43		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	2	
C7544,45		ECQB1H473JH	P.CAPACITOR 50V 0.047U	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
			DIODES		
D7501		MA3068	DIODE	1	
D7502		MA73	DIODE	1	
D7509-17		MA73	DIODE	9	
D7522,23		MA73	DIODE	2	
D7525-27		MA73	DIODE	3	
D7531-33		MA73	DIODE	3	
D7535		MA73	DIODE	1	
D7538		MA73	DIODE	1	
D7540		MA73	DIODE	1	
D7543,44		LN28RCPL	DIODE	2	
D7546		LN38GCPL	DIODE	1	
D7547,48		LN28RCPL	DIODE	2	
D7550		LN48YCPL	DIODE	1	
D7551		VLL0062	DIODE	1	
D7552		MA73	DIODE	1	
D7556,57		MA73	DIODE	2	
			DISPLAY TUBES		
DP7501		VSL0144	DISPLAY TUBE	1	
			INTEGRATED CIRCUITS		
IC7501		MN187164VLGT	IC	1	
IC7502		BA6810S	IC	1	
IC7503		M6M800Z1P	IC	1	
IC7505		MN1280K	IC	1	
IC7506		MN1280S	IC	1	(S)
IC7507		M34225V1AH	IC	1	
			COILS		
L7501		ELESP221KA	COIL 220UH	1	
			CONNECTORS		
P7501		VJS3193P018A	CONNECTOR (FEMALE)	1	
P7502		VJS3193P016A	CONNECTOR (FEMALE)	1	
P7503		VJS2357A020	CONNECTOR (FEMALE)	1	
P7504		VJP2621	CONNECTOR (MALE)	1	
			COMBINATION PARTS		
QR7501,02		MRN2403	TRANSISTOR-RESISTOR	2	
QR7503		MRN2402	TRANSISTOR	1	
QR7504		MRN1404	TRANSISTOR	1	
			RESISTORS		
R7504		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R7505		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R7506		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R7508		ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R7509		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7510-12		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	3	
R7513		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R7514		ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	1	
R7515		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R7516		ERJ6GEYJ683	M.RESISTOR CH 1/10W 68K	1	
R7517-20		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	4	
R7521		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7522,23		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R7524-26		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	3	
R7528,29		ERJ6GM20R00	M.RESISTOR CH 1/10W 0	2	
R7531-33		ERJ6GEYJ181	M.RESISTOR CH 1/10W 180	3	
R7535		ERJ6GEYJ181	M.RESISTOR CH 1/10W 180	1	
R7536		ERJ6GEYJ390	M.RESISTOR CH 1/10W 39	1	
R7543,44		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R7545		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R7546-48		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	3	
R7549		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7550-54		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	5	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R7555		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R7556,57		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	2	
R7558,59		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R7561-69		ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	9	
R7570		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R7571,72		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	2	
			COMBINATION PARTS		
RX7501		EXBF11E104J	COMBI.R-R	1	
RX7502		EXBF8E104J	COMBI.R-R	1	
			VARIABLE RESISTORS		
VR7501		EVNDXAA00B53	V.RESISTOR 5K	1	
			CRYSTAL OSCILLATORS		
X7501		VSX0484	CRYSTAL OSCILLATOR	1	
X7502		VSX0094	CRYSTAL OSCILLATOR	1	
X7503		EF0GC3584A5		1	
			MISCELLANEOUS		
		VEK5789	IR RECEIVER UNIT	1	(NIA)<!>
		VJF0693	FIP HOLDER	1	
		VJF0740	LED SPACER	1	
		VMD1342	LED SPACER	1	
	■	VEP07664C	TIMER C.B.A.		(NIA)NV-FS88EG
			CAPACITORS		
C7501		ECEA1HKS100	E.CAPACITOR 50V 10U	1	
C7502,03		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7504		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C7505		ECEA0JKS330	E.CAPACITOR 6.3V 33U	1	
C7506		ECUM1H223ZFN	C.CAPACITOR CH 50V 0.022U	1	
C7507		ECEA1EKS4R7	E.CAPACITOR 25V 4.7U	1	
C7508		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C7509		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C7510		ECUM1H050CCN	C.CAPACITOR CH 50V 5P	1	
C7511		ECRHA030E41	TRIMMER 3P	1	
C7512		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C7513		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C7514		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C7515		ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
C7516		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C7517		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C7519		ECEA0JKS470	E.CAPACITOR 6.3V 47U	1	
C7520		ECUM1H104ZFN	C.CAPACITOR 50V	1	
C7521		ECEA0JKS470	E.CAPACITOR 6.3V 47U	1	
C7523-36		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	14	
C7537,38		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7539,40		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	2	
C7541		ECEA1EKS4R7	E.CAPACITOR 25V 4.7U	1	
C7542,43		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	2	
C7544,45		ECQB1H473JH	P.CAPACITOR 50V 0.047U	2	
			DIODES		
D7501		MA3068	DIODE	1	
D7502		MA73	DIODE	1	
D7509-17		MA73	DIODE	9	
D7522,23		MA73	DIODE	2	
D7525		MA73	DIODE	1	
D7527		MA73	DIODE	1	
D7531-33		MA73	DIODE	3	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
D7535		MA73	DIODE	1	
D7538		MA73	DIODE	1	
D7540		MA73	DIODE	1	
D7543,44		LN28RCPL	DIODE	2	
D7546		LN38GCPL	DIODE	1	
D7547,48		LN28RCPL	DIODE	2	
D7551		VLL0062	DIODE	1	
D7552		MA73	DIODE	1	
D7556,57		MA73	DIODE	2	
			DISPLAY TUBES		
DP7501		VSL0144	DISPLAY TUBE	1	
			INTEGRATED CIRCUITS		
IC7501		MN187164VLGT	IC	1	
IC7502		BA6810S	IC	1	
IC7503		M6M80021P	IC	1	
IC7505		MN1280K	IC	1	
IC7506		MN1280S	IC	1	(S)
IC7507		M34225V1AH	IC	1	
			COILS		
L7501		ELESP221KA	COIL 220UH	1	
			CONNECTORS		
P7501		VJS3193F018A	CONNECTOR (FEMALE)	1	
P7502		VJS3193F016A	CONNECTOR (FEMALE)	1	
P7503		VJS2357A020	CONNECTOR (FEMALE)	1	
P7504		VJP2621	CONNECTOR (MALE)	1	
			COMBINATION PARTS		
QR7501,02		MRN2403	TRANSISTOR-RESISTOR	2	
QR7503		MRN2402	TRANSISTOR	1	
QR7504		MRN1404	TRANSISTOR	1	
			RESISTORS		
R7504		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R7505		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R7506		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R7508		ERJ6GEYGZ23	M.RESISTOR CH 1/10W 22K	1	
R7509		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7510-12		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	3	
R7513		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R7514		ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	1	
R7515		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R7516		ERJ6GEYJ683	M.RESISTOR CH 1/10W 68K	1	
R7517-20		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	4	
R7521		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7522,23		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R7524-26		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	3	
R7528,29		ERJ6GMZOR00	M.RESISTOR CH 1/10W 0	2	
R7531-33		ERJ6GEYJ181	M.RESISTOR CH 1/10W 180	3	
R7536		ERJ6GEYJ390	M.RESISTOR CH 1/10W 39	1	
R7543,44		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R7545		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R7546-48		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	3	
R7549		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7550-54		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	5	
R7555		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R7556,57		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	2	
R7558,59		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R7561-69		ERJ6GEYGZ23	M.RESISTOR CH 1/10W 22K	9	
R7570		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R7571,72		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	2	
			COMBINATION PARTS		
RX7501		EXBF11E104J	COMBI.R-R	1	
RX7502		EXBF8E104J	COMBI.R-R	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
			VARIABLE RESISTORS		
VR7501		EVNDXAA00B53	V.RESISTOR 5K	1	
			CRYSTAL OSCILLATORS		
X7501		VSX0484	CRYSTAL OSCILLATOR	1	
X7502		VSX0094	CRYSTAL OSCILLATOR	1	
X7503		EFOGC3584A5		1	
			MISCELLANEOUS		
		VEK5789	IR RECEIVER UNIT	1	(NLA)<!>
		VJF0693	FIP HOLDER	1	
		VJF0740	LED SPACER	1	
		VMD1342	LED SPACER	1	
	■	VEP06778A	JOG C.B.A.		(NLA)
			DIODES		
D6701-03		LN38GCPPV	DIODE	3	
			CONNECTORS		
P6701		VJS2621	CONNECTOR (FEMALE)	1	
			RESISTORS		
R6701-03		ERDS2TJ221	C.RESISTOR 1/4W 220	3	
			SWITCHES		
SW6701		EVQ11407K	SWITCH	1	
			MISCELLANEOUS		
		VMX1652	LED SPACER	3	
		VSQ0798	JOG ENCODER	1	
	■	VEP01381J	POWER C.B.A.		(NLA)<!>
			CAPACITORS		
C1101,02		ECQU2A224MN	P.CAPACITOR 250V 0.22U	2	<!>
C1105		VCC0021	C.CAPACITOR	1	<!>
C1108		VCC0021	C.CAPACITOR	1	<!>
C1111		VCC0023	CAPACITOR	1	<!>
C1112		ECOS2GA121G	E.CAPACITOR 400V 120U	1	
C1113		ECA2GNX010X	CAPACITOR	1	
C1114		ECQE6473B11	P.CAPACITOR	1	
C1115		ECKD3D331KBN	C.CAPACITOR 2KV 330P	1	
C1116		ECQB1H682JZ	P.CAPACITOR 50V 6800P	1	
C1117		ECA1CXLV470	E.CAPACITOR 16V	1	
C1118		ECQB1H103JZ	P.CAPACITOR 50V 0.01U	1	
C1119		ECQV1H334JF	P.CAPACITOR 50V 0.33U	1	
C1120		ECQP1101JZ	P.CAPACITOR 100V 100P	1	
C1121		ECEA1HFE121	E.CAPACITOR 50V 120U	1	
C1122,23		ECA1CFZ122	E.CAPACITOR 16V 1200U	2	
C1124		ECA1AFZ102	E.CAPACITOR 10V 1000U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C1126		ECEA1VFE820	E.CAPACITOR 35V 82U	1	
C1127		ECEA1HGE100	E.CAPACITOR 50V 10U	1	
C1128-30		ECEA1AGE101	E.CAPACITOR 10V 100U	3	
C1131		ECEA1CFE331	E.CAPACITOR 16V 330U	1	
C1132		ECKF1H1032F	C.CAPACITOR 50V 0.01U	1	
C1137		ECKF1H1032F	C.CAPACITOR 50V 0.01U	1	
C1138		ECEA1CGE100	E.CAPACITOR 16V 10U	1	
C1139		ECQV1H105JZ	P.CAPACITOR 50V 1U	1	
C1141		ECEA1HFE270	E.CAPACITOR 50V 27U	1	
			DIODES		
D1102-05		EM1B	DIODE	4	<!>
D1106		VSD0002	DIODE	1	<!>
D1107		AP01C	DIODE	1	
D1108		MA4030L	DIODE	1	
D1109		MA178	DIODE	1	
D1110		MA165VT	DIODE	1	
D1111		ERA22-02	DIODE	1	
D1112		FMLG12SP	DIODE	1	
D1113		10ELS2	DIODE	1	
D1114		FMBG14L	DIODE	1	
D1116		MA2160A	DIODE	1	
D1117		MA4130L	DIODE	1	
			INTEGRATED CIRCUITS		
IC1101		STRD6009E	IC	1	<!>
IC1102		STK5392	IC	1	
IC1103		SE014N	IC	1	
			COILS		
L1101,02		ELF18D221F	COIL	2	<!>
L1103		ELC07B009	COIL	1	
L1104,05		VLQEL06F101K	COIL 100UH	2	
L1106		ELC07B009	COIL	1	
			CONNECTORS		
P1101		VJP1930T	CONNECTOR (MALE)	1	
P1102		VJS2625	CONNECTOR (FEMALE)	1	<!>
P1103		VJP1149	CONNECTOR (MALE)	1	
			TRANSISTORS		
Q1101		PC111AD	TRANSISTOR	1	<!>
Q1102		2SD1330	TRANSISTOR	1	
			RESISTORS		
R1101		ERC12AGM334	S.RESISTOR 1/2W 330K	1	<!>
R1102,03		ERDS1TJ563	C.RESISTOR 1/2W 56K	2	
R1104,05		ERDS2TJ474	C.RESISTOR 1/4W 470K	2	
R1106		ERG3ANJ683	M.RESISTOR 3W 68K	1	
R1107		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R1108		ERD2FTVC681	C.RESISTOR 1/4W 680	1	<!>
R1109		ERDS2TJ121	C.RESISTOR 1/4W 120	1	
R1110		ERW1PK2R2	W.RESISTOR 1W	1	
R1111,12		ERG2SJ820	M.RESISTOR 2W 82	2	
R1113,14		ERG2SJ560	M.RESISTOR 2W 56	2	
R1115		ERG1SJ182	M.RESISTOR 1W 1.8K	1	
R1116		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R1117		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R1118		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
			TRANSFORMERS		
T1101		VLT0685	TRANSFORMER	1	<!>
			MISCELLANEOUS		
		VJF0318	FUSE HOLDER	4	<!>
		VMZ1184	CAPACITOR COVER (B)	2	<!>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
	■	VEP00S21A	S TERMINAL C.B.A.		(NLA)
			CONNECTORS		
J3991,92		VJJ0161	CONNECTOR	2	
P3991		VJP1248T	CONNECTOR(MALE) 8P	1	
	■	VEX0117	CYLINDER DRIVE C.B.A.		(NLA)
			CAPACITORS		
C2901-03		ECEA1VSN2R2	E.CAPACITOR 35V 2.2U	3	
C2904-06		ECUM1E104KBM	C.CAPACITOR CH 25V 0.1U	3	
C2907		ECUM1E683KBM	C.CAPACITOR CH 25V 0.068U	1	
C2908		ECUM1E473KBM	C.CAPACITOR CH 25V 0.047U	1	
C2909		ECQV1H104JS	P.CAPACITOR 50V 0.1U	1	
C2910,11		ECEA1CKS100	E.CAPACITOR 16V 10U	2	
C2912		ECEA0JKS220	E.CAPACITOR 6.3V 22U	1	
			INTEGRATED CIRCUITS		
IC2901		AN3815K	IC	1	
			CONNECTORS		
P2901		VJP2603W	CONNECTOR (MALE)	1	
P2902		VJP1232T	CONNECTOR(MALE) 5P	1	
			RESISTORS		
R2901		ERX12SJR47	M.RESISTOR 1/2W 0.47	1	
			HEATERS		
TH2901		VRH0017	HEATER	1	
			MISCELLANEOUS		
		VMA8089	MAIN HOLDER	1	
	■	VEP03893A	TBC C.B.A.		(NLA)NV-FS200EG
			CAPACITORS		
C9001		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C9002		ECQV1H473JZ	P.CAPACITOR 50V 0.047U	1	
C9003		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C9004		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C9005		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C9006		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C9007		ECUM1H4732FN	C.CAPACITOR CH 50V 0.047U	1	
C9008		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C9009		ECUM1H473ZFN	C.CAPACITOR CH 50V 0.047U	1	
C9010		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C9011		ECQB1H333JH	P.CAPACITOR 50V 0.033U	1	
C9012		ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	1	
C9013		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C9014		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C9015		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C9016		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C9017		ECQB1H223JH	P.CAPACITOR 50V 0.022U	1	
C9018		ECEA1HK3R3	E.CAPACITOR 50V 3.3U	1	
C9019		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C9020,21		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	2	
C9022		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C9023		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C9024		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C9025		ECUM1H152KBN	C.CAPACITOR CH 50V 1500P	1	
C9026		ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C9027		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C9028		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C9029		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C9030		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C9031,32		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C9033		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C9034		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C9035		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C9036,37		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	2	
C9038		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C9039		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C9040		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C9041		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C9042		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C9043-50		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	8	
C9051		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C9052-56		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	5	
C9057		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C9058		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C9059		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C9060		ECUM1H050DCN	C.CAPACITOR CH 50V 5OP	1	
C9061		ECUM1H020CCN	C.CAPACITOR CH 50V 2P	1	
C9062		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C9063		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C9064		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C9065		ECUM1H682KBN	C.CAPACITOR CH 50V 6800P	1	
C9066		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C9067-69		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	3	
C9070		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C9071,72		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C9073		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C9074		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C9075		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C9076		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C9077		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C9078		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C9079		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C9080		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C9081,82		ECEA0JK470	E.CAPACITOR 6.3V 47U	2	
C9083-86		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	4	
C9087		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C9088		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C9089		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C9090,91		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C9092		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C9093		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C9094		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C9095		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C9096,97		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C9098,99		ECEA1CKN100	E.CAPACITOR 16V 10U	2	
			DIODES		
D9001		MA151K	DIODE	1	
			FILTERS		
FL9001-05		VLF0633	FILTER	5	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
FL9008	ELKAH103EB	FILTER	1	
FL9009	VLF0839	FILTER	1	
FL9010	VLF0838	FILTER	1	
FL9011	VLF0874	FILTER	1	
FL9012	VLF0855	FILTER	1	
FL9013	ELB4P034	FILTER	1	
FL9014	VLF0875	FILTER	1	
FL9015-17	VLF0634	FILTER	3	
FL9020,21	VLF0634	FILTER	2	
FL9025	VLF0634	FILTER	1	
FL9026	ELKAH101GB	FILTER	1	
FL9027	ELKAH103EB	FILTER	1	
FL9028	VLF0634	FILTER	1	
		INTEGRATED CIRCUITS		
IC9001	AN3942SB	IC	1	
IC9002	AN3496S	IC	1	
IC9003	MN74HC4066S	IC	1	
IC9004,05	HA19211BNT	IC	2	
IC9006	AN3915S	IC	1	
IC9007,08	SC41547FU	IC	2	
IC9009	MN73026VME	IC	1	
		COILS		
L9001	VLQ0188J2R2	COIL 2.2UH	1	
L9002,03	VLQEL05F101K	COIL 100UH	2	
L9004	VLQEL05P680K	COIL 68UH	1	
L9005	VLQEL05F270K	COIL 27UH	1	
L9006	VLQ0188J2R2	COIL 2.2UH	1	
L9007	VLQEL05F101K	COIL 100UH	1	
L9008,09	VLQ0188J2R2	COIL 2.2UH	2	
L9010	VLQ0188J6R8	COIL 6.8UH	1	
L9011-14	VLQ0188J2R2	COIL 2.2UH	4	
L9018,19	VLP0054	COIL	2	
L9024	VLP0054	COIL	1	
		CONNECTORS		
P9001	VJP3080	CONNECTOR (MALE)	1	
P9002	VJP1231T	CONNECTOR (MALE) 4P	1	
		TRANSISTORS		
Q9001	MSB709	TRANSISTOR	1	
Q9002	MSD601	TRANSISTOR	1	
Q9003	MSB709	TRANSISTOR	1	
Q9004	MSD601	TRANSISTOR	1	
Q9005,06	MSB709	TRANSISTOR	2	
Q9007-09	MSD601	TRANSISTOR	3	
Q9010,11	MSB709	TRANSISTOR	2	
Q9012	MSD601	TRANSISTOR	1	
Q9013,14	MSB709	TRANSISTOR	2	
Q9015	MSD601	TRANSISTOR	1	
Q9016	2SC2295	TRANSISTOR	1	
Q9017	MSD601	TRANSISTOR	1	
Q9018	MSB709	TRANSISTOR	1	
Q9019	MSD601	TRANSISTOR	1	
Q9020	2SC2295	TRANSISTOR	1	
Q9021	MSD601	TRANSISTOR	1	
Q9022	MSB709	TRANSISTOR	1	
Q9023	MSD601	TRANSISTOR	1	
Q9024	MSB709	TRANSISTOR	1	
Q9025	MSD601	TRANSISTOR	1	
		COMBINATION PARTS		
QR9007,08	MRN1404	TRANSISTOR	2	
QR9010	MRN1404	TRANSISTOR	1	
QR9012-14	MRN1404	TRANSISTOR	3	
		RESISTORS		
R9001-06	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	6	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R9007	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R9008,09	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R9010,11	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	2	
R9014,15	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R9017,18	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R9019	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R9020-23	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	4	
R9024	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R9025	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R9026	ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R9027-29	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	3	
R9030	ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R9031	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R9037	ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R9038	ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R9039	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R9040	ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R9041	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R9042	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R9043	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R9044	ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R9045	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R9046	ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R9047,48	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R9049	ERJ6GEYJ683	M.RESISTOR CH 1/10W 68K	1	
R9050	ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R9051,52	ERJ6GEYJ683	M.RESISTOR CH 1/10W 68K	2	
R9053	ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R9054,55	ERJ6GEYJ683	M.RESISTOR CH 1/10W 68K	2	
R9056	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R9057	ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R9058	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R9059,60	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R9061	ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R9062	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R9063,64	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	2	
R9065	ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R9066	ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R9067	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R9068-70	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	3	
R9071	ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R9072,73	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R9074	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R9075	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R9076	ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R9077	ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R9078	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R9079	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R9080,81	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R9082	ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R9083	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R9084	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R9085,86	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	2	
R9087	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R9088	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R9089	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R9090	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R9091,92	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R9093	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R9094	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R9095	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R9096	ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R9097	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R9098	ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R9099	ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R9100	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R9101	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R9104	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R9106-08	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	3	
R9109,10	ERJ6GEYJ330	M.RESISTOR CH 1/10W 33	2	
R9111	ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R9112	ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R9113	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R9114	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R9117	ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R9118		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R9119		ERJ6GEYGZ23	M.RESISTOR CH 1/10W 2ZK	1	
R9120		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R9121,22		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R9123		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
			VARIABLE RESISTORS		
VR9001		EVN4LCA00B13	V.RESISTOR 1K	1	
VR9002		EVNUXAA00B54	V.RESISTOR 50K	1	
VR9003		EVN4LCA00B13	V.RESISTOR 1K	1	
VR9004		EVNDXAA00B24	V.RESISTOR 20K	1	
VR9005,06		EVN4LCA00B14	V.RESISTOR 10K	2	
VR9007		EVN4YCA00B13	V.RESISTOR 1K	1	
			CRYSTAL OSCILLATORS		
X9001		EFOA5004BR	CRYSTAL OSCILLATOR	1	
X9002		VSX0404	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		VSC3619	SHIELD COVER (MAIN)	1	
		VSC3620	SHIELD COVER (BOTTOM)	1	
		VSC3618	SHIELD COVER (TOP)	1	
		VMX1921	RUBBER SPACER	1	
	■	VEP04359A	FRONT INPUT C.B.A.		(NLA)NV-FS200EG
			CAPACITORS		
C3951,52		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	2	
C4951,52		ECCF1H101JC	C.CAPACITOR 50V 100P	2	
			CONNECTORS		
J3951		VJJ0209	S INPUT TERMINAL	1	
J3952		VJJ0215	RCA PIN JACK	1	
J3953		VJJ0182	SYNC EDIT JACK	1	
			COILS		
L4951,52		VLQ0188J101	COIL 100UH	2	
			CONNECTORS		
P3951		VJP2760	CONNECTOR (MALE)	1	
			RESISTORS		
R4951,52		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	2	
			MISCELLANEOUS		
		VMX1679	JACK SPACER	1	
		VSC2932	SHIELD COVER	1	
	■	VEP00K88C	FE HEAD AMP C.B.A.		(NLA)
			CAPACITORS		
C1401		ECEA1CK100	C.CAPACITOR 16V 10U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
			COMBINATION PARTS		
CR1401		EXED1032333	CAPACITOR-RESISTOR	1	
			TRANSISTORS		
Q1401		2SD1991-R	TRANSISTOR	1	
			MISCELLANEOUS		
		VJP1148	CONNECTOR (MALE) 2P	1	
		VLQ0188J101	COIL 100UH	1	
		EIQ7QF012Q	COIL	1	
		VWJ0121	JAMPER	1	
		ECQB1H333JH	P.CAPACITOR 50V 0.033U	1	
		ECQB1H472JZ	P.CAPACITOR 50V 4700P	1	
	■	VEP00P61A	REV MOTOR CONNECTION C.B.A.		(NLA)
			MISCELLANEOUS		
		VJP1244	CONNECTOR (MALE) 4P	1	
		VLP0083	FILTER	1	
	■	VXA3825	MECHANISM CONNECTION C.B.A.		(NLA)
			MISCELLANEOUS		
		VJS1493	CONNECTOR (FEMALE) 15P	1	
		ON2170-LF1	PHOTO COUPLER	2	
		VM21366	PROTECTION SHEET	1	
	■	VEK3578	PHOTO Tr. (S) C.B.A.		(NLA)
			MISCELLANEOUS		
		ECKZ1H102KB	C.CAPACITOR 50V 1000P	1	
		PN150NV	PHOTO TRANSISTOR	1	
		VMD0645	HOLDER	1	
	■	---------	PHOTO Tr. (T) C.B.A.		(NLA)
			MISCELLANEOUS		
		ECKZ1H102KB	C.CAPACITOR 50V 1000P	1	
		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
		PN150NV	PHOTO TRANSISTOR	1	
		VJS2165W	CONNECTOR (FEMALE) 6P	1	
		VMD0645	HOLDER	1	

V 1184

GRUNDIG SERVICE MANUAL

VIDEO

Ⓓ Btx *32700 #

Laufwerk G 2

(3-Motoren-Laufwerk)

Drive Mechanism G 2

(3-motor drive mechanism)

Ⓓ GB

Inhaltsverzeichnis

		Seite
1.	Absenken des Cassettenschachtes von Hand	2
2.	Cassettenauswurf von Hand	2
3.	Ausbau des Cassettenschachtes	3
4.	Einbau des Cassettenschachtes	3
5.	Arbeiten am Bandtrommelbaustein	4 - 6
6.	Mechanische Einstellungen	6 - 12
7.	Hinweise zu Reparaturen in der Antriebsmechanik	13 - 18
8.	Allgemeine Hinweise	18
9.	Explosionszeichnungen	19 - 21

List of contents

		Page
1.	Lowering the Cassette Compartment by Hand	2
2.	Ejecting the Cassette by Hand	2
3.	Removing the Cassette Compartment	3
4.	Refitting the Cassette Compartment	3
5.	Working on the Tape Drum Unit	4 - 6
6.	Mechanical Adjustments	6 - 12
7.	Notes on Repairing the Drive Mechanism	13 - 18
8.	General Notes	18
9.	Explosion views	19 - 21

Meßgeräte / Meßmittel

Test equipment / aids

		z.B. / e.g. **GRUNDIG**
Zweikanaloszilloskop	Dual channel oscilloscope	MO 20, MO 53
Regeltrenntrafo	Variable isolating transformer	RT 5 A
		Sach-Nr. / Part no
Kopfscheibenabzieher (VFK 0341)	Head wheel extractor (VFK 0341)	75987 - 262.96
Referenzplatte (VFK 0387)	Tension post adjustment plate (VFK 0387)	75987 - 262.86
Einstellplatte (VFK 0191)	Post adjustment plate (VFK 0191)	75987 - 262.75
Höhenmeßuhr (VFK 0190)	Dial hight gauge (VFK 0190)	75987 - 262.76
Höhenlehre (VFK 0344)	Hight gauge (VFK 0344)	75987 - 262.87
Bandzugmesser (VFK 0132)	Tape tension meter (VFK 0132)	75987 - 262.74
Kontaktor (0,1N...1N)	Tension gauge (0.1N...1N)	72001 - 401.00
Kontaktor (0,5N...5N)	Tension gauge (0.5N...5N)	72001 - 403.00
Einstellschraubendreher	Post adjustment screw driver	75987 - 262.80
Sechskant-Stiftschlüssel 2mm	Hexagonal wrench 2mm	72004 - 082.00
Testcassette	Test cassette	9.27540 - 1011
Testcassette (HiFi)	Test cassette (HiFi)	9.27540 - 1016

Die Meßmittel können Sie über die Serviceorganisation beziehen. Wir weisen jedoch darauf hin, daß diese z.T. bereits am Markt eingeführt sind.

You can order the test equipments from the Service organization. We refer to you that these test equipments are already obtainable on the market.

1. Absenken des Cassettenschachtes von Hand (ohne Cassette)

- Netzstecker ziehen.
- Riemenscheibe (137) ca. 3 Umdrehungen im Uhrzeigersinn drehen.
- Sicherungshebel (P) ausrasten (Fig. 1).
- Riemenscheibe (137) um eine Umdrehung weiterdrehen.
- Hebel (Q) nach unten drücken und Sicherungshebel (P) erneut ausrasten.
- Cassettenschacht durch Weiterdrehen der Riemenscheibe (137) vollständig absenken

1. Lowering the Cassette Compartment by Hand (without cassette)

- Disconnect the machine from mains.
- Rotate the drive belt pulley (137) approx. 3 revolutions in the clockwise direction.
- Release the locking lever (P) (Fig. 1).
- Rotate the drive belt pulley (137) by one more revolution.
- Push the lever (Q) down and release the locking lever (P) once again.
- Lower the cassette compartment fully by rotating the drive belt pulley (137) further in a clockwise direction.

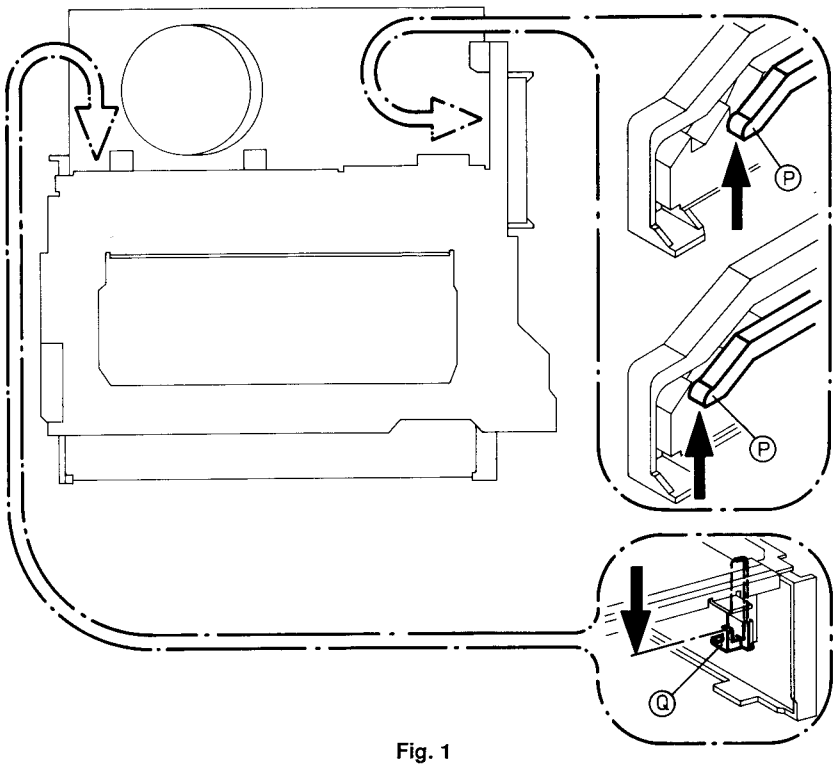


Fig. 1

2. Cassettenauswurf von Hand

a) Netzstecker ziehen
b) Umstellhebel (122) durch Drücken in Pfeilrichtung (Fig. 2) ausrasten.
c) Capstanrotor langsam gegen den Uhrzeigersinn drehen, bis die Kupplungsscheibe (116) einrastet.
d) Schritte b) und c) wiederholen bis die Cassette ausgeworfen wird.

2. Ejecting the Cassette by Hand

a) Disconnect the machine from the mains.
b) Disengage the change-over lever (122) by pressing it in the direction of the arrow (Fig. 2).
c) Rotate the capstan rotor slowly anti-clockwise until the clutch disk (116) locks.
d) Repeat steps b) and c) until the cassette is ejected.

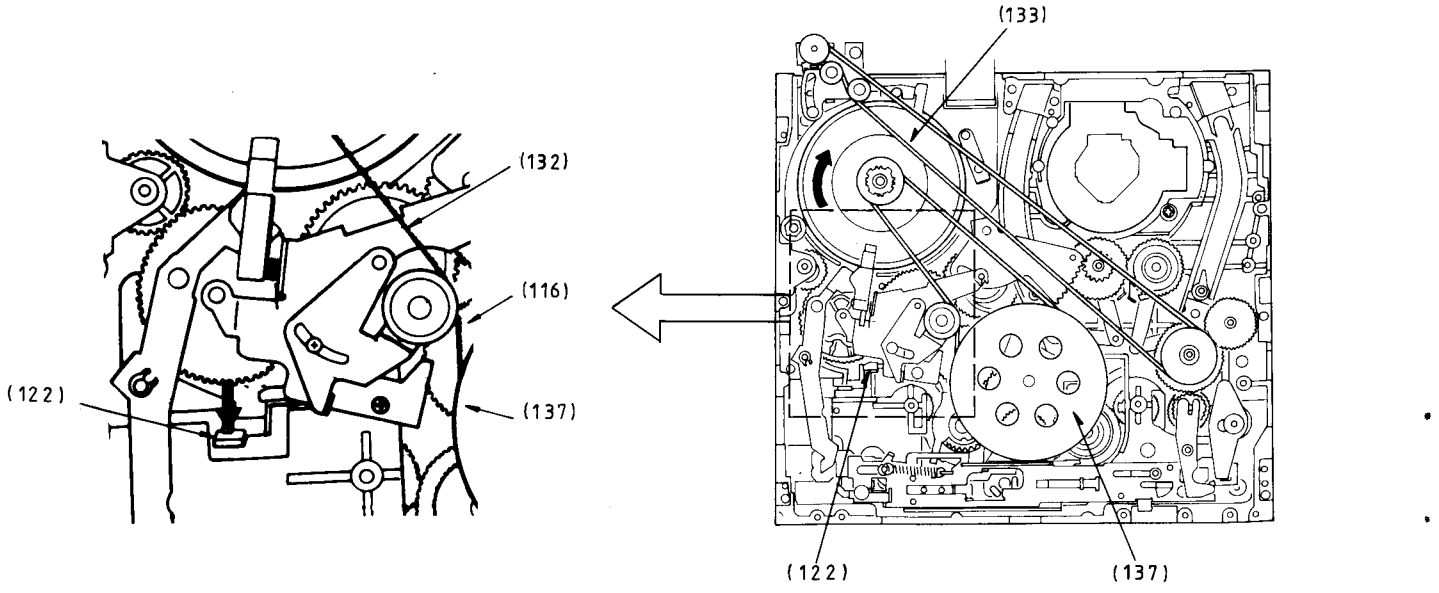


Fig. 2

3. Ausbau des Cassettenschachts

- 2 Schrauben "A" herausdrehen (Fig. 3).
- Cassettenschacht durch Drehen des Capstanrotors (133) im Uhrzeigersinn soweit bewegen, bis die 2 Schrauben "B" entfernt werden können.
- Steckverbindung P1508 abziehen und Cassettenschacht herausnehmen.

4. Einbau des Cassettenschachtes

- Umstellhebel (122), Fig. 2, oder Kern der Spule (66), Fig. 4, in Pfeilrichtung drücken, um die Verriegelung zu öffnen.
- Capstanrotor entgegen dem Uhrzeigersinn drehen bis die Mechanik die Stellung "Auswerfen" erreicht hat (Endanschlag).
- Lage des Markierungslochs (a) oder der Markierungsnase (d) des Zwischenrades (65) merken (Fig. 5) und Capstanrotor in entgegengesetzter Richtung solange drehen, bis das Zwischenrad (65) eine Umdrehung entgegen dem Uhrzeigersinn gemacht hat.
- Cassettenschacht soweit verschieben, bis der 2. Zahn der Zahnstange (224) über dem rechtwinkligen Loch "C" liegt (Fig. 6).
- Gegebenenfalls 2 Schrauben "D" herausdrehen und Abdeckplatte (201) entfernen, sodaß die Zahnstange (224) und das Zwischenrad (65) beim Einbau zu sehen sind.
- Cassettenschacht so in das Laufwerk einsetzen, daß der 2. Zahn der Zahnstange (224) in der 5. Zahnlücke des Zwischenrades (65) eingreift (Fig. 7). Gegebenenfalls Cassettenschacht geringfügig verschieben.
- Abdeckplatte (201) montieren und die 6 Schrauben in der Reihenfolge "D", "A", "B" eindrehen (Fig. 3, Fig. 6)
- Steckverbindung P 1508 kontaktieren

Hinweis:
Falls die Schachtfunktionen nicht richtig ausgeführt werden, Einbau wiederholen.

3. Removing the Cassette Compartment

- Remove the 2 screws "A" (Fig. 3).
- Rotate the capstan rotor (133) to move the cassette compartment so that it is possible to remove the 2 screws "B".
- Pull out the plug-type connector P1508 and remove the cassette compartment.

4. Refitting the Cassette Compartment

- Press the change-over lever (122), Fig. 2, or the core of the solenoid (66), Fig. 4, in the direction of the arrow to disengage the lever.
- Rotate the capstan rotor in the anti-clockwise direction until the mechanics reaches the "Eject" position (end stop).
- Note the position of the marking hole (a) or the marking lug (d) on the intermediate gear (65), Fig. 5, and rotate the capstan rotor in the opposite direction until the intermediate gear (65) makes one complete revolution in anti-clockwise direction.
- Move the cassette compartment so that the 2nd tooth of the toothed rack (224) is positioned over the right angled hole "C" (Fig. 6).
- If necessary, remove the 2 screws "D" and remove the top plate (201) so that the toothed rack (224) and the intermediate gear (65) can be seen during assembly.
- Insert the cassette compartment into the mechanics so that the 2nd tooth of the toothed rack (224) engages with the 5th tooth space of the intermediate gear (65) (Fig. 7). If necessary move the cassette by a small amount.
- Fit the top plate (201) and tighten the 6 screws in the sequence "D", "A", "B" (Fig.3, Fig.6).
- Reconnect the plug connector P1508.

Note:
If the functions of the cassette compartment are not carried out correctly, repeat the assembly procedure.

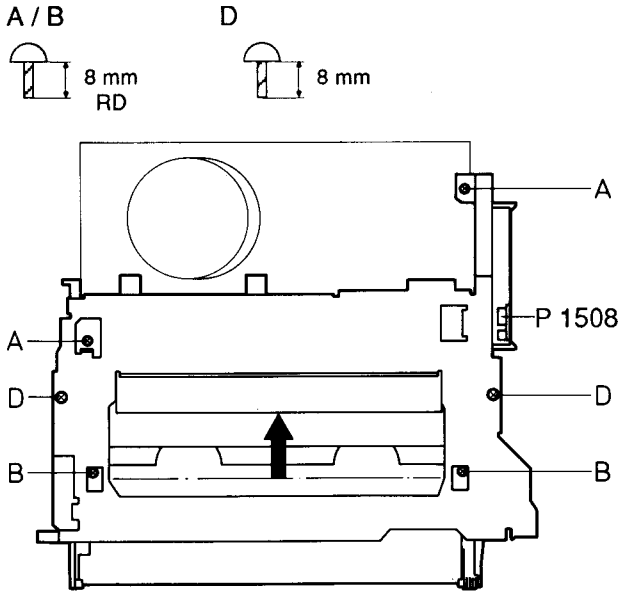


Fig. 3

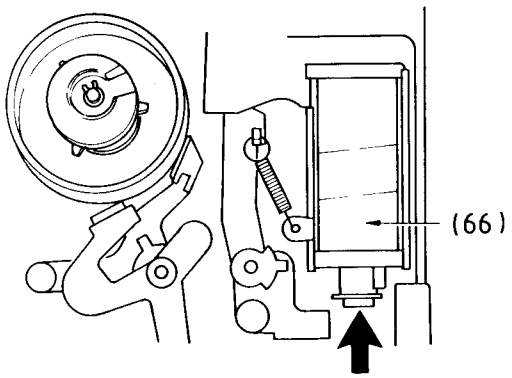


Fig. 4

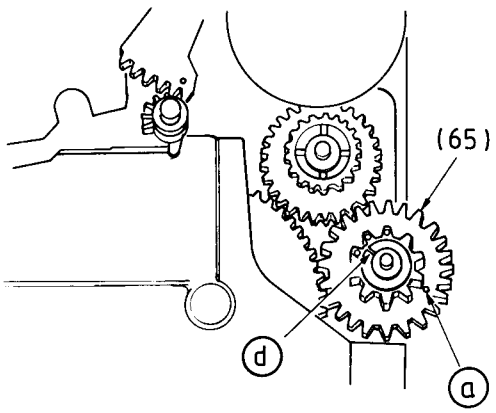


Fig. 5

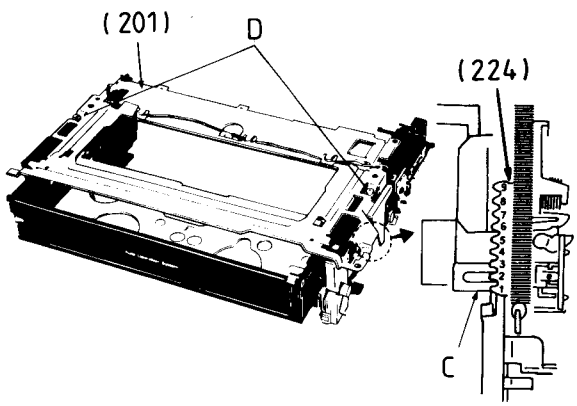


Fig. 6

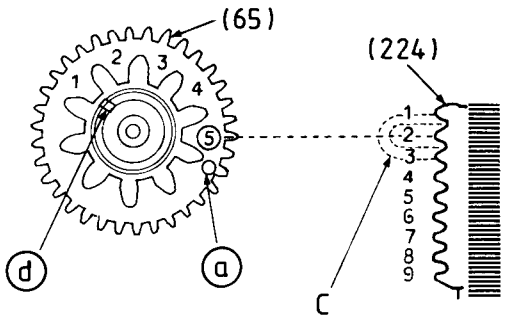


Fig. 7

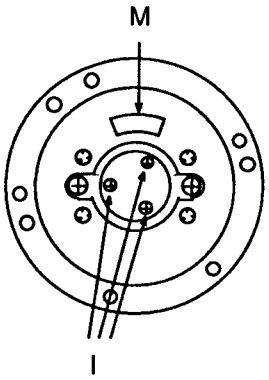


Fig. 8

5. Arbeiten am Bandtrommelbaustein
5.1 Austausch der Kopfscheibe (7)

Servicemittel: Kopfscheibenabzieher
Achtung:
- Die Kopfscheibe sitzt sehr fest auf der Antriebsachse. Arbeiten Sie deshalb mit äußerster Sorgfalt und berühren Sie die Videoköpfe nicht!
- Wenn sich nach dem Einbau die weißen Flächen "M" (Fig. 12) nicht decken, erfolgt die Wiedergabe vorher durchgeführter Aufnahmen in Schwarz / Weiß!
- Die 3 Schrauben "I" nicht lösen (Fig. 8)!

Ausbau:
- Schrauben "F", "H" herausdrehen und Erdungsfeder (5) entfernen (Fig. 9 / Fig. 10).
- Kopfscheibenanschlüsse "K" entlöten, Außenring der Kopfscheibe (7) leicht anwärmen (z.B. Fön) und Kopfscheibe (7) vorsichtig abziehen (Fig. 10).
  Gegebenenfalls Kopfscheiben-Abziehvorrichtung verwenden (Fig.11). Hierzu die Abziehvorrichtung in den Gewindelöchern "L" der Kopfscheibe befestigen und den Handgriff im Uhrzeigersinn drehen bis die Kopfscheibe von der Achse abgezogen ist.

Einbau:
- Kopfscheibe (7) so auf die Antriebsachse stecken, daß sich die weißen Flächen "M" decken (Fig. 12).
- Schrauben "H" eindrehen und Erdungsfeder (5) montieren.
- Kopfscheibenanschlüsse "K" anlöten.

5. Working on the Tape Drum Module
5.1 Replacing the Head Wheel (7)

Service Aid: Head Wheel Extractor
Attention:
- The Head Wheel is fitted very tightly onto the drive shaft. Therefore, when carrying out service work be very careful and especially ensure that the video heads are not touched!
- If, after reassembly, the white areas "M" (Fig. 12) do not coincide, previous recordings on the tape will be reproduced on playback in black and white!
- Do not loosen the 3 screws "I" (Fig. 8)

Removing:
- Remove the screws "F" and "H" and then the earthing spring (5) (Fig. 9 / Fig. 10).
- Unsolder the head wheel connections "K". Warm up the outer ring of the head wheel (e.g. Hairdryer) and pull the head wheel (7) off carefully (Fig. 10).
- If necessary use the head wheel extractor (Fig.11). For this locate the extractor into the holes "L" drilled in the head wheel and rotate the handle in the clockwise direction until the head wheel is pulled off the shaft.

Refitting:
- Fit the head wheel (7) onto the shaft so that the white areas "M" coincide (Fig.12).
- Refit the screws "H" and the earthing spring (5) with screw "F".
- Resolder the head wheel connections "K".

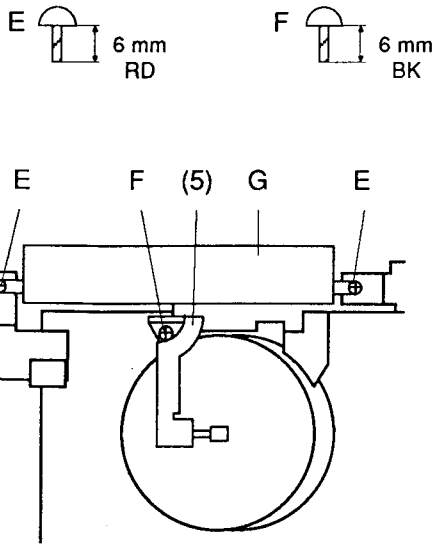


Fig. 9

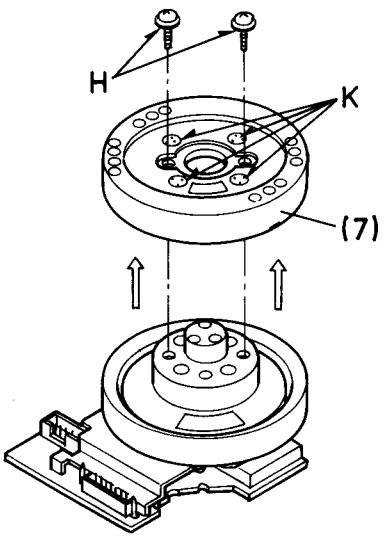


Fig. 10

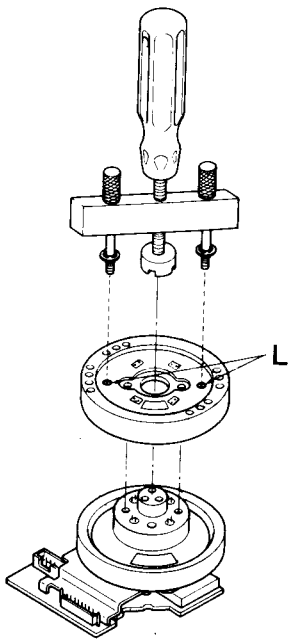


Fig. 11

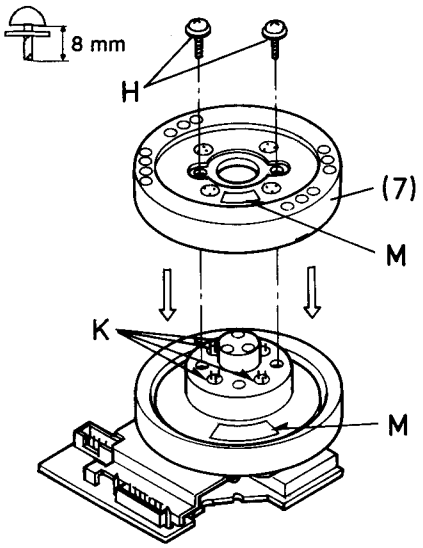


Fig. 12

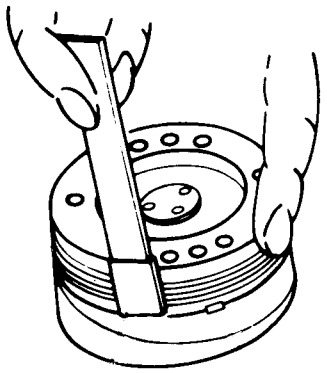


Fig. 13

5.2 Reinigen der Kopfscheibe

- Kopfscheibe festhalten und Videoköpfe mit einem spiritusgetränkten Reinigungsstäbchen in Bandlaufrichtung vorsichtig abreiben (Fig.13).

5.3 Austausch des Bandtrommelbausteins

Ausbau des Bandtrommelbausteins (6)
- 3 Schrauben "E" und "F" herausdrehen (Fig. 9).
- Kopfverstärker "G" und Erdungsfeder (5) entfernen.
- Steckverbindungen lösen.
- 3 Schrauben "N" entfernen (Fig. 14) und Bandtrommelbaustein (6) vorsichtig aus dem Laufwerk ziehen.

Einbau des Bandtrommelbausteins (6)
- Bandtrommelbaustein (6) ins Laufwerk stecken und 3 Schrauben "N" eindrehen (Fig. 14).
- Erdungsfeder (5) mit Schraube "F" befestigen (Fig. 9).
- Kopfverstärker "G" und Steckverbindungen kontaktieren.
- 2 Schrauben "E" eindrehen
- Bandlauf- / Kompatibilitätseinstellung prüfen (Kap. 6.8)

5.4 Austausch der Kopfscheiben-Motorsteuerplatte

- Bandtrommelbaustein gemäß Kap. 5.3 ausbauen.
- Lötstelle "O" öffnen und Abschirmung entfernen (Fig. 15).
- 18 Lötstellen "P", einschließlich der 10 in der Abbildung Fig. 15 nicht sichtbaren, öffnen.
- 2 Schrauben "Q" herausdrehen und Kopfscheiben-Motorsteuerplatte entfernen.

Der Einbau erfolgt in umgekehrter Reihenfolge.

5.2 Cleaning the Head Wheel

- Hold the head wheel stationary and clean the video heads with a cleaning stick soaked with spirit by wiping carefully in the direction of the tape transport (Fig.13).

5.3 Replacing the Tape Drum Module

Removing the Tape Drum Module (6)
- Remove the 3 screws "E" and "F" (Fig. 9).
- Remove the head amplifier "G" and the earthing spring (5).
- Loosen the plug connectors.
- Remove the 3 screws "N" (Fig. 14) and pull the Tape Drum Module (6) carefully out of the mechanics.

Refitting the Tape Drum Module (6)
- Place the Tape Drum Module (6) into the mechanics and tighten the 3 screws "N" (Fig. 14).
- Refit the earthing spring (5) with the screw "F" (Fig. 9).
- Reconnect the Head Amplifier "G" and the plug connectors.
- Refit the 2 screws "E".
- Check the Tape Transport/Compatibility Adjustment (para 6.8)

5.4 Replacing the Head Wheel-Motor Drive Panel

- Remove the Tape Drum Module as described in para 5.3.
- Unsolder the solder pads "O" and remove the screen (Fig. 15).
- Open the 18 solder connections "P" including the 10 not visible in the illustration (Fig. 15).
- Undo the 2 screws "Q" and remove the Head Wheel-Motor Drive Panel.

For reassembly, reverse the sequence.

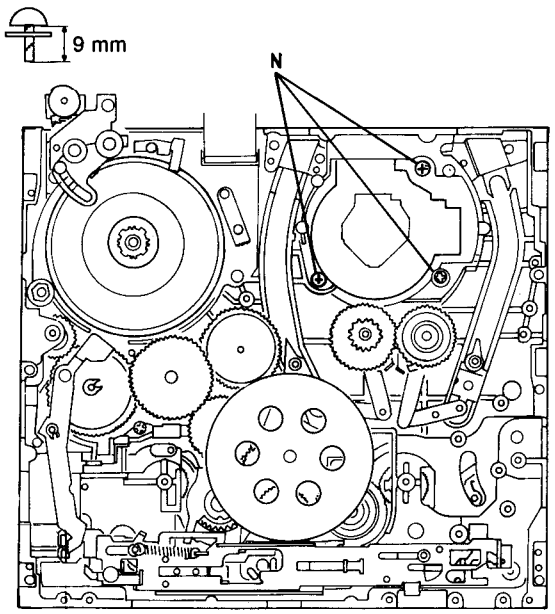


Fig. 14

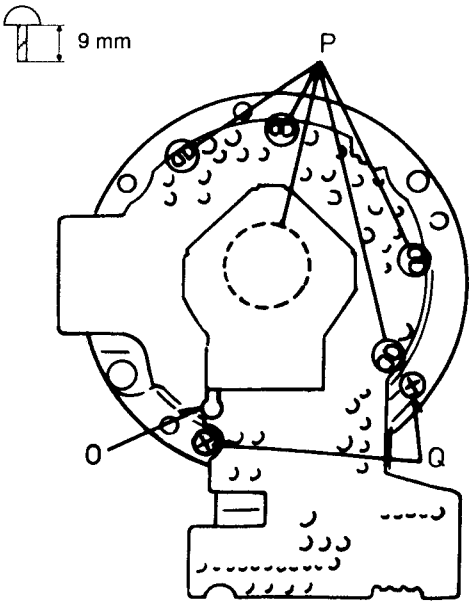


Fig. 15

5.5 Austausch des Kopfscheiben-Motorsteuer-IC´s

- Kopfscheiben-Motorsteuerplatte gemäß Kapitel 5.4 ausbauen.
- Schraube "R" (Fig. 16) und Kühlblech entfernen.
- IC auslöten.

Der Einbau erfolgt in umgekehrter Reihenfolge.

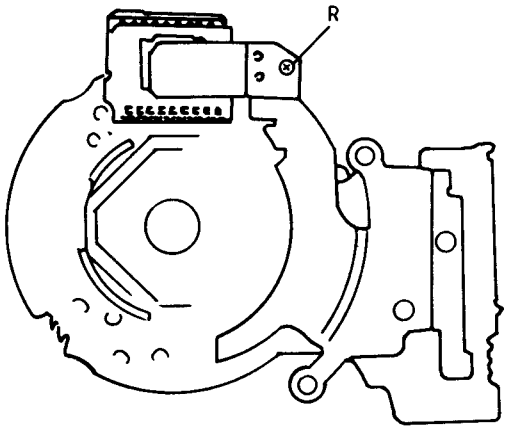


Fig. 16

5.5 Replacing the Head Wheel-Motor Drive IC

- Remove the Head Wheel-Motor Drive Panel as described in para 5.4.
- Release the screw "R" (Fig. 16) and the heat sink.
- Unsolder the IC.

For reassembly, reverse the sequence.

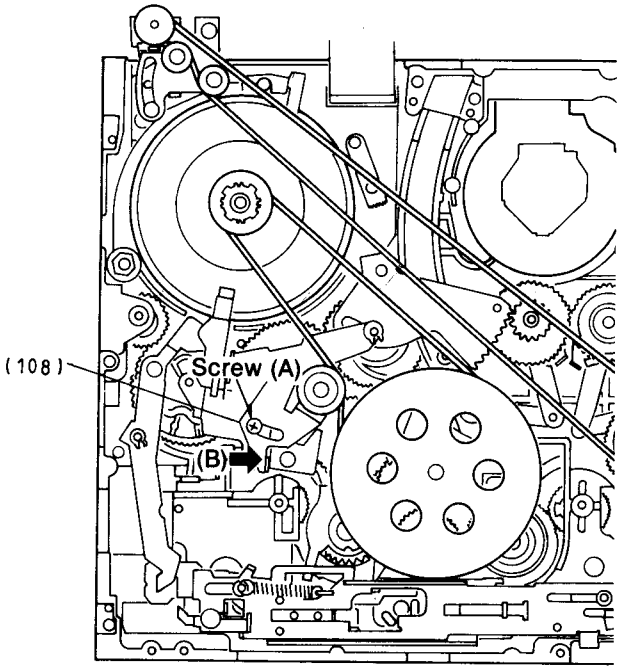


Fig. 17

6. Mechanische Einstellungen

6.1 Einstellen der Riemenspannung des Capstanmotors

Meßmittel: Kontaktor (0,1N - 1N)

- Schraube (A) lösen (Fig. 17).
- Kontaktor am Punkt (B) ansetzen und Spannrollenhebel (108) in Pfeilrichtung (B) drücken.
- Zeigt die Skala des Kontaktors 0,4 N ± 0,05 N (Einstellwert) an, Schraube (A) anziehen.

6.2 Einstellen der Riemenspannung des Umspulmotors

Meßmittel: Kontaktor (0,5N - 5N)

- Schraube (C) lösen (Fig. 18).
- Kontaktor am Punkt (D) ansetzen und Spannrollenhebel (93) in Pfeilrichtung (D) drücken.
- Zeigt die Skala des Kontaktors 2,25 N ± 0,25 N (Einstellwert) an, Schraube (C) anziehen.

6. Mechanical Adjustments

6.1 Adjusting the Belt Tension of the Capstan Motor

Service Aid: Tension gauge (0.1N - 1N)

- Loosen the screw (A), (Fig. 17).
- Fit the Tension Gauge to point (B) and press the tension roller lever (108) in the direction of the arrow (B).
- When the Tension Gauge indicates 0.4 N ± 0.05 N (Specified Value), tighten the screw (A).

6.2Adjusting the Belt Tension of the Capstan Motor

Service Aid: Tension gauge (0,5N - 5N)

- Loosen the screw (C), (Fig. 18)
- Fit the Tension Gauge to point (D) and press the tension roller lever (93) in the direction of the arrow (D).
- When the Tension Gauge indicates 2.25 N ± 0.25 N (Specified Value), tighten the screw (C).

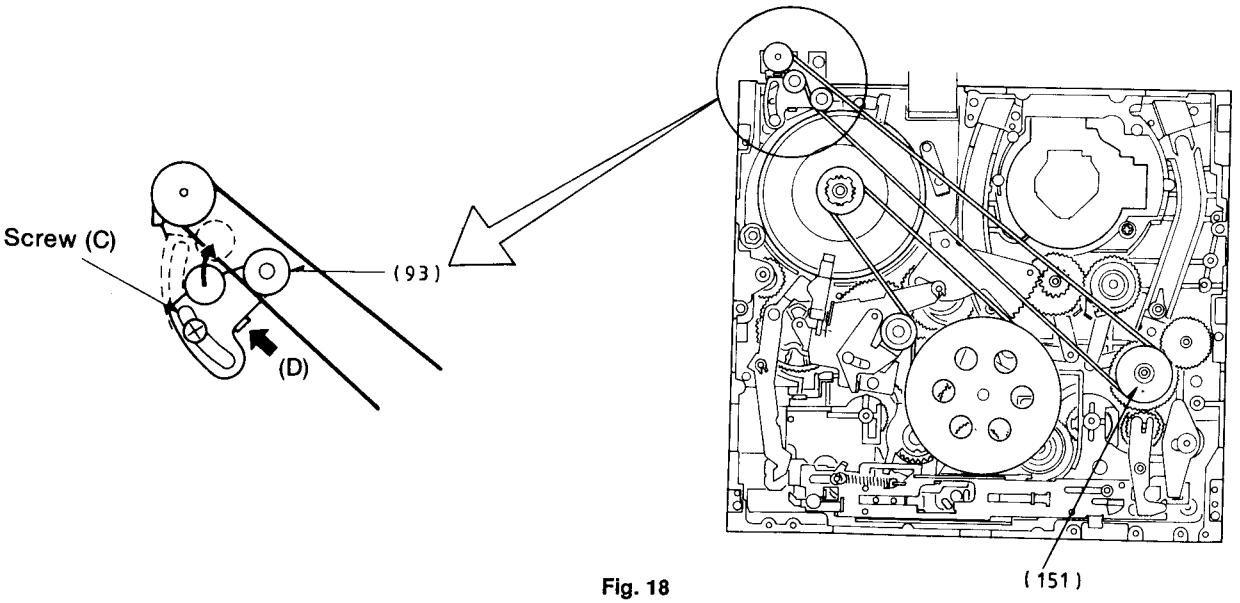


Fig. 18

6.3 Lageeinstellung des Bandzugfühlers

Meßmittel: Referenzplatte, Sechskantstiftschlüssel 2mm

- Gerät vom Netz trennen.
- Cassettenschacht ausbauen (Kap. 3).
- Umstellhebel (122) drücken und Capstanrotor (133) im Uhrzeigersinn drehen bis der Einfädelvorgang abgeschlossen ist (Fig. 19). Dabei den Umschalthebel (122) wiederholt ausrasten.
- Referenzplatte auflegen.
- Exzenter "S" der Bremsbandbefestigung mit dem Sechskantstiftschlüssel so einstellen, daß der Bandzugbolzen "T" gerade die Referenzplatte berührt (Fig. 20).
- Referenzplatte entfernen und Capstanrotor (133) solange entgegen dem Uhrzeigersinn drehen, bis ausgefädelt ist. Dabei den Umschalthebel (122) wiederholt ausrasten.
- Cassettenschacht einbauen (Kap. 4).

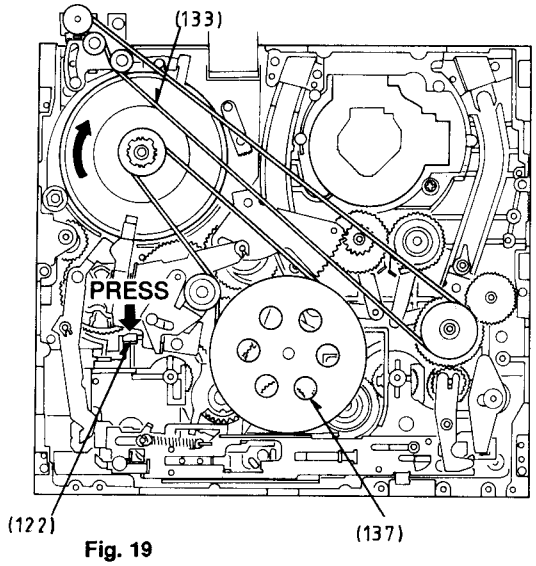


Fig. 19

6.3 Adjustment of the Tape Tension Sensor position

Service Aid: Tension post adjustment plate, Hexagon Wrench (Allen Key) 2mm

- Disconnect the recorder from the mains.
- Remove the cassette compartment (para 3)
- Press the change-over lever (122) and rotate the capstan rotor (133) in the clockwise direction until the loading-in process is completed (Fig. 19). In doing so, disengage the change-over lever (122) repeatedly.
- Fit the Tension Post Adjustment Plate.
- Adjust the cam "S" on the brake band securing point with the hexagon wrench so that the tape tension bolt "T" just touches the Tension Post Adjustment Plate (Fig. 20).
- Remove the Tension Post Adjustment Plate and rotate the capstan rotor (133) in the anti-clockwise direction until the mechanics unloads. In doing so, disengage the change-over lever (122) repeatedly.
- Refit the cassette compartment (para 4).

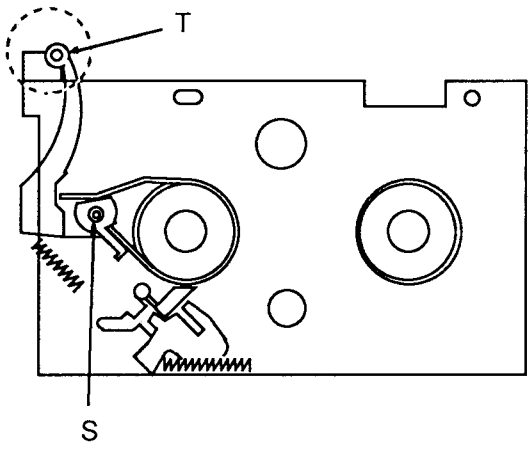


Fig. 20

6.4 Messen und Einstellen des Bandzuges

Meßmittel: Bandzugmesser, A/W-Cassette E 120

- A / W-Cassette E 120 vom Bandanfang an abspielen
- Nach ca. 20 Sekunden den Bandzugmesser "BZ" nach Fig.21 in den Bandlauf einfügen.
- Weicht der abgelesene Bandzug vom Sollwert 0,2 N ... 0,25 N ab, den Bandzug durch Umhängen der Feder (12) auf den Sollwert einstellen (Fig. 22).

Hinweis: Während der Messung müssen die Fühler des Bandzugmessers guten Kontakt zum Band haben. Messung mehrmals wiederholen.

6.4 Measuring and Adjusting the Tape Tension

Service Aids:
Tape tension meter, Record / Playback cassette E120

- Playback the R/P Cassette E120 from the beginning.
- After about 20 seconds fit the Tape Tension Meter "BZ" as shown in Fig. 21.
- If the measured value is different from the specified value of 0.2N ... 0.25N, relocate the spring (12) to obtain the specified value (Fig. 22).

Note: When making measurements, ensure that the probes of the meter are in good contact with the tape. Repeat this measurement several times.

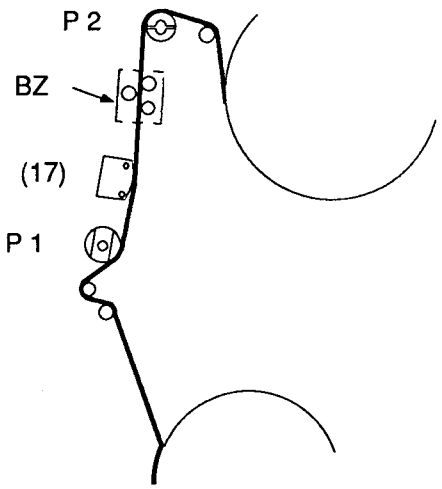


Fig. 21

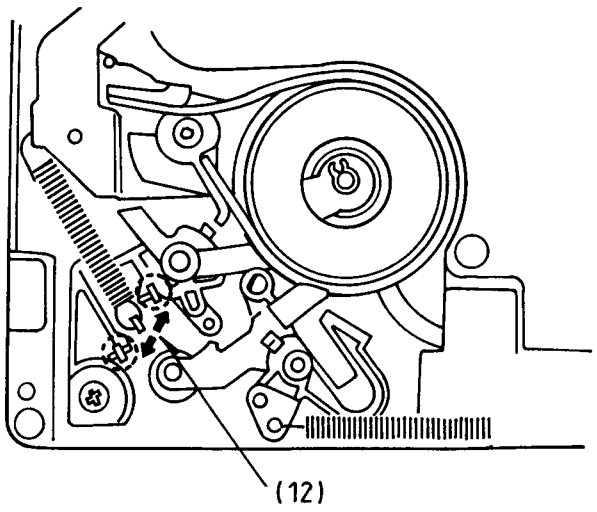


Fig. 22

6.5 Einstellen des Capstanrotors (133)

Meßmittel: Höhenmeßuhr, Höhenlehre
- Einstellschraube (41), Fig. 23, soweit herausdrehen, bis sich Capstanstator (135) und -rotor (133) gerade berühren.
- Höhenlehre "U" auf den Capstanrotor (133) legen und Höhenmeßuhr nach Abbildung Fig. 24 auf dem geschliffenen Laufwerkrand positionieren. Skala der Höhenmeßuhr auf Null stellen.
- Mit der Einstellschraube (41) Abstand zwischen Capstanrotor (133) und -stator (135) auf 0,5 mm...0,55 mm einstellen (Fig. 25).

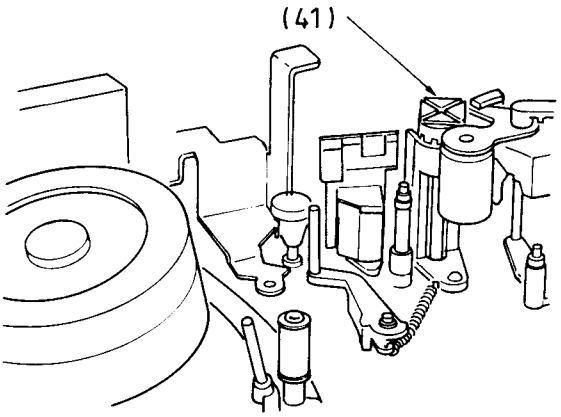


Fig. 23

6.5 Adjusting the Capstan Rotor (133)

Service Aids: Dial Height Gauge, Height Gauge
- Loosen the adjustment screw (41), Fig. 23, until the capstan stator (135) just touches the rotor (133).
- Place the Height Gauge "U" onto the capstan rotor (133) and the Dial Height Gauge as shown in Fig. 24 onto the smooth area on the edge of the mechanics. Set the pointer of the Dial Height Gauge to zero.
- With the adjustment screw (41) adjust the distance between the capstan rotor (133) and the stator (135) to 0.5mm...0.55mm (Fig. 25).

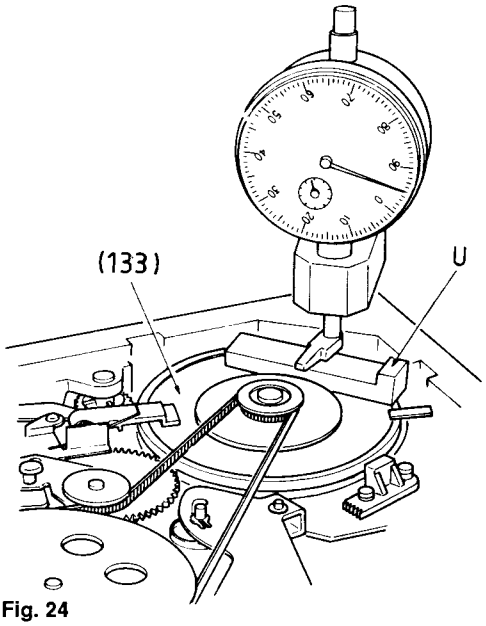


Fig. 24

6.6 Höheneinstellung der Wickelteller

Meßmittel: Einstellplatte, Höhenmeßuhr
- Cassettenschacht ausbauen (Kap. 3).
- Einstellplatte auf die Wickelteller legen.
- Höhenmeßuhr so auf die Einstellplatte legen, daß deren Meßfuß im ausgearbeiteten Teil der Einstellplatte aufsitzt (Fig. 26).
- Skala der Höhenmeßuhr auf Null stellen
- Höhe der Wickelteller (14), (71) messen (Fig. 27).
- Wenn der gemessene Wert mehr als ± 0,2mm vom eingestellten Nullwert der Skala abweicht, Wickeltellerhöhe durch Austauschen der Unterlegscheiben einstellen. Folgende Unterlegscheiben sind lieferbar:

6.6 Height Adjustment of the Spool Carriers

Service Aid: Post Adjustment Plate, Dial Height Gauge
- Remove the cassette compartment (para 3)
- Place the Post Adjustment Plate onto the spool carrier.
- Place the Dial Height Gauge onto the Post Adjustment Plate so that the measuring probe of the Dial Height Gauge locates into the cut-out provided on the Post Adjustment Plate (Fig. 26).
- Set the pointer of the Dial Hight Gauge to zero.
- Measure the height of the spool carrier (14), (71)- (Fig. 27).
- If the measured value differs from the zero Value of the pointer by more than ± 0.2mm, readjust the spool carrier height by replacing the shim washer. The following shim washers are available:

Unterlegscheibe / Washer / Rondella	Sachnummer / Part Number / No. ordine
0,2 mm 0,3 mm 0,5 mm	75 986 - 208.21 75 986 - 208.22 75 986 - 208.23

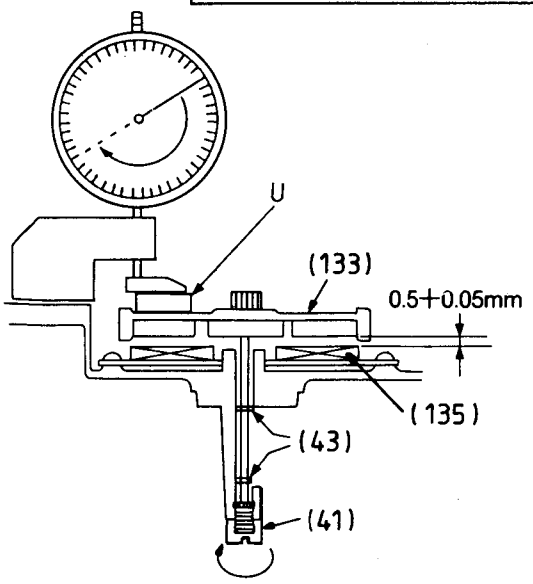


Fig. 25

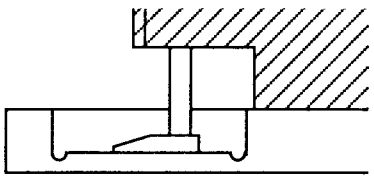


Fig. 26

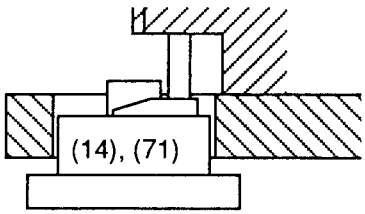


Fig. 27

6.7 Statische Höheneinstellung der Bandbolzen P2, P3 und P5

Meßmittel: Einstellplatte, Höhenmeßuhr, Einstellschraubendreher

Vorbereitung:
- Cassettenschacht ausbauen (Kap. 3)
- Einstellplatte nach Abbildungen Fig. 28 / 31 auf die Wickelteller legen.

6.7.1 Bandführungsbolzen P2, P3

- Höhe der Bandführungsbolzen P2 / P3 so einstellen, daß der untere Führungsbund unter der Oberkante der Einstellplatte liegt (Fig. 29).
- Höhenmeßuhr nach Abbildung Fig. 29 plazieren und Anzeige auf Null stellen. Anschließend Bandführungsbolzen soweit hochdrehen, bis der untere Führungsbund gerade den Meßfühler der Höhenmeßuhr berührt (Fig. 30).
- Schraube "V" nicht lösen! Sie dient zur Neigungseinstellung der Führungsbolzen P2, P3.
- Statische Höheneinstellung kontrollieren (Kap. 6.7.3).

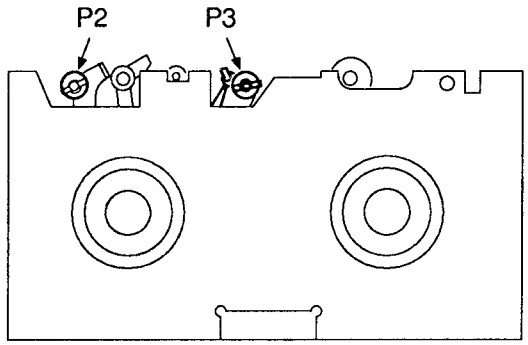


Fig. 28

6.7 Static Height Adjustment of Tape Bolts P2, P3 and P5

Service Aids: Post Adjustment Plate, Dial Height Gauge, Post Adjustment screw driver

Preparations:
- Remove the cassette compartment (para 3)
- Place the Post Adjustment Plate onto the spool carrier as shown in Fig. 28 / 31.

6.7.1 Tape Guide Bolts P2, P3

- Adjust the height of the Tape Guide Bolts P2, P3 so that the lower guide collar lies below the upper edge of the Post Adjustment Plate (Fig. 29).
- Place the Dial Height Gauge as shown in Fig. 29 and set the pointer to zero. Afterwards adjust to raise the height of the Tape Guide Bolts so that the lower guide collar just touches the measuring probe of the Dial Height Gauge (Fig. 30).
- Do not loosen screw "V"! This screw is only for adjusting the tilt of the Guide Bolts P2, P3.
- Check the Static Height Adjustment (para 6.7.3).

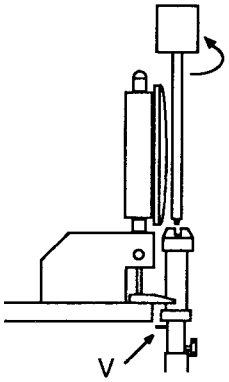


Fig. 29

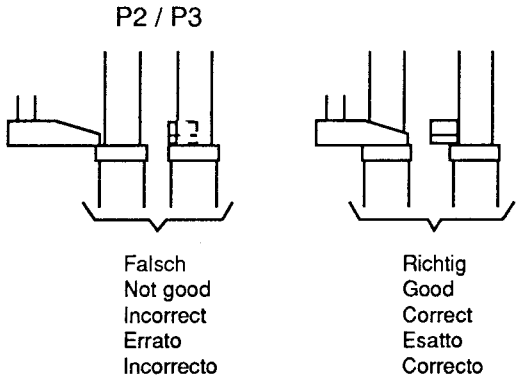


Fig. 30

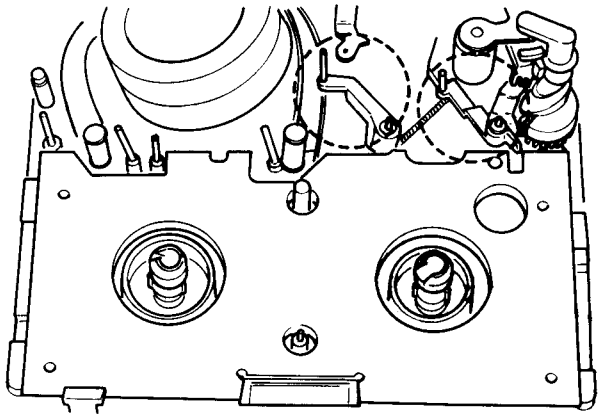


Fig. 31

6.7.2 Bandauszugsbolzen P5

Hinweis: Einstellmutter (52) des Bandauszugsbolzens P5 nur zu Justagezwecken verdrehen!
- Capstanrotor soweit entgegen dem Uhrzeigersinn drehen, bis die in Abbildung Fig. 31 gezeigte Laufwerkstellung erreicht ist.
- Höhenmeßuhr nach Abbildung Fig. 32 auf die Einstellplatte stellen und Skala auf "Null" eichen.
- Höhenmeßuhr nach Abbildung Fig. 33 am unteren Führungsbund des Bandauszugsbolzens P5 auflegen und mit der Einstellmutter (52) die Anzeige der Höhenmeßuhr auf 0,03 mm ±0,01 mm einstellen.
- Statische Höheneinstellung kontrollieren (Kap. 6.7.3).

6.7.2 Tape Pull-Out Bolt P5

Note: The Adjustment Nut (52) on the Tape Pull-out Bolt P5 must be turned for adjustment purposes only!
- Rotate the capstan rotor in the anti-clockwise direction until the mechanics reaches the position shown in Fig. 31.
- Place the Dial Height Gauge onto the Post Adjustment Plate as shown in Fig. 32 and adjust the pointer to zero.
- Place the Dial Height Gauge as shown in Fig. 33 onto the lower guide collar of the Tape Pull-out Bolt P5 and adjust the nut (52) until the pointer of the Dial Height Gauge indicates 0.03 mm ± 0.01 mm.
- Check the Static Height Adjustment (para 6.7.3).

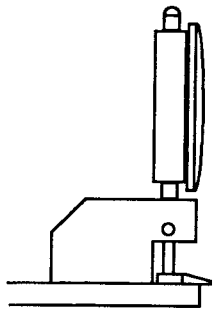


Fig. 32

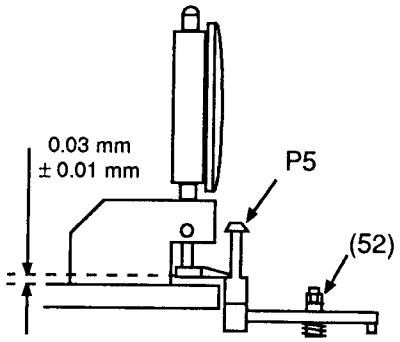


Fig. 33

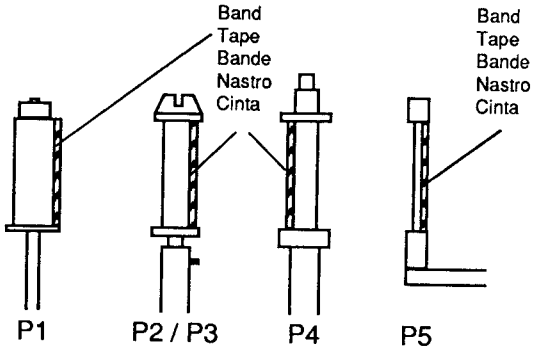


Fig. 34

6.7.3 Kontrolle der statischen Höheneinstellung

- Cassettenschacht einbauen (Kap. 4).
- A / W - Cassette wiedergeben.
- Prüfen, ob das Band an den Bolzen P1, P2, P3, P4 und P5 ohne zu bördeln läuft (Fig. 34...Fig. 36).
- Gegebenenfalls Höhenjustage Kap. 6.7.1 und 6.7.2 wiederholen.
- Dynamische Einstellung der Bandführungsbolzen P2, P3 prüfen (Kap. 6.8.1)

6.7.3 Checking the Static Height Adjustment

- Refit the cassette compartment (para 4).
- Playback a record / playback cassette.
- Check that the tape runs past the Bolts P1, P2, P3, P4 and P5 without crinkling (Fig. 34 ... Fig. 36).
- If necessary, repeat the height adjustment as described in paras 6.7.1 and 6.7.2.
- Check the Dynamic Adjustment of the Tape Guide Bolts P2, P3 (para 6.8.1).

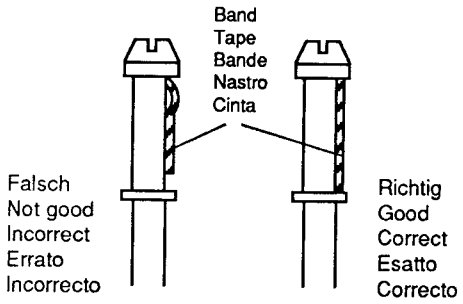


Fig. 35

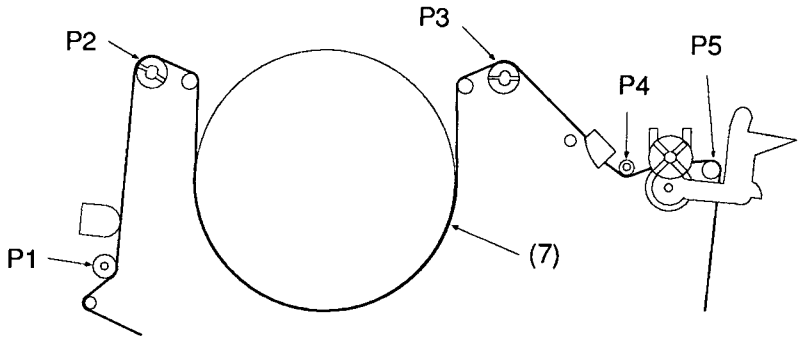


Fig. 36

6.8 Bandlaufeinstellung / Kompatibilitäts-einstellung

Diese Einstellungen sind grundsätzlich nach Tausch des Audio-/ Synchronkopfes (A/C), der Andruckrolle oder nach Justage der Bolzen P2, P3, P5 durchzuführen bzw. zu überprüfen. Dabei muß folgende Reihenfolge eingehalten werden:

6.8.1 Dyn. Einstellung der Bolzen P2, P3
6.8.2 Einstellen der Neigung des A/C -Kopfes
6.8.3 Höheneinstellung des A/C-Kopfes
6.8.4 Azimut-Einstellung des A/C-Kopfes
6.8.5 Einstellen der horizontalen Lage des A/C-Kopfes

6.8 Tape Transport Adjustment / Compatibility Adjustment

These adjustments must be carried out or checked in every case after every replacement of the A/C head, the Pressure Roller or after adjusting the Bolts P2, P3, P5. The following sequence must be adhered to:

6.8.1 Dynamic adjustment of the Bolts P2, P3
6.8.2 Tilt adjustment of the A/C Head
6.8.3 Height adjustment of the A/C Head
6.8.4 Azimuth adjustment of the A/C Head
6.8.5 Horizontal position adjustment of the A/C Head

6.8.1 Dynamische Einstellung der Bolzen P2, P3

Meßmittel: Testcassette, Oszilloskop

- Oszilloskop nach Abbildung Fig. 37 anschließen:
  Tastkopf 1 an TP 1
  Tastkopf 2 an TP 2
- Testcassette wiedergeben (Tracking in Mittelstellung)
- Falls sich Hüllkurven wie die Beispiele "A" und "B" in Abbildung Fig. 38 zeigen, Hüllkurve mit dem Einlauf-Bandführungsbolzen P2 nach Abbildung Fig. 38 - "E" einstellen.
- Falls sich Hüllkurven wie die Beispiele "C" oder "D" in Abbildung Fig. 38 zeigen, Hüllkurve mit Auslauf-Bandführungsbolzen P3 nach Abbildung Fig. 38 - "E" einstellen.
- Trackingeinstellung nach "+" und "-" variieren. Dabei sollen die Hüllkurvenränder parallel zusammenlaufen (Fig. 39).
- Tracking auf maximale Hüllkurvenamplitude einstellen. Diese muß folgende Grenzwerte einhalten (Fig. 40):
  V1 / V ≥ 0,7 ; V2 / V ≥ 0,8
- Gegebenenfalls Einstellung wiederholen.

6.8.1 Dynamic adjustment of the Bolts P2, P3

Service Aids: Test Cassette, Oscilloscope

- Connect the oscilloscope as shown in Fig. 37:
  Test Probe 1 to TP 1
  Test Probe 2 to TP 2
- Playback the test cassette (tracking to mid setting).
- If the FM envelopes are displayed as shown in examples "A" and "B" in Fig. 38 adjust with the Run-in Tape Guide Bolt P2 so that the FM envelopes are as shown in Fig. 38 - "E".
- If the FM envelopes are displayed as shown in example "C" or "D" in Fig. 38, adjust with the Run-out Tape Guide Bolt P3 so that the FM envelopes are as shown in Fig. 38 - "E".
- Vary the Tracking in the "+" and "-" directions. When doing so the FM envelope should show parallel converging lines (Fig. 39).
- Adjust the tracking to obtain maximum FM envelope amplitude. This must produce the following basic values (Fig. 40):
  V1 / V ≥ 0.7 ; V2 / V ≥ 0.8
- If not obtained repeat these adjustments.

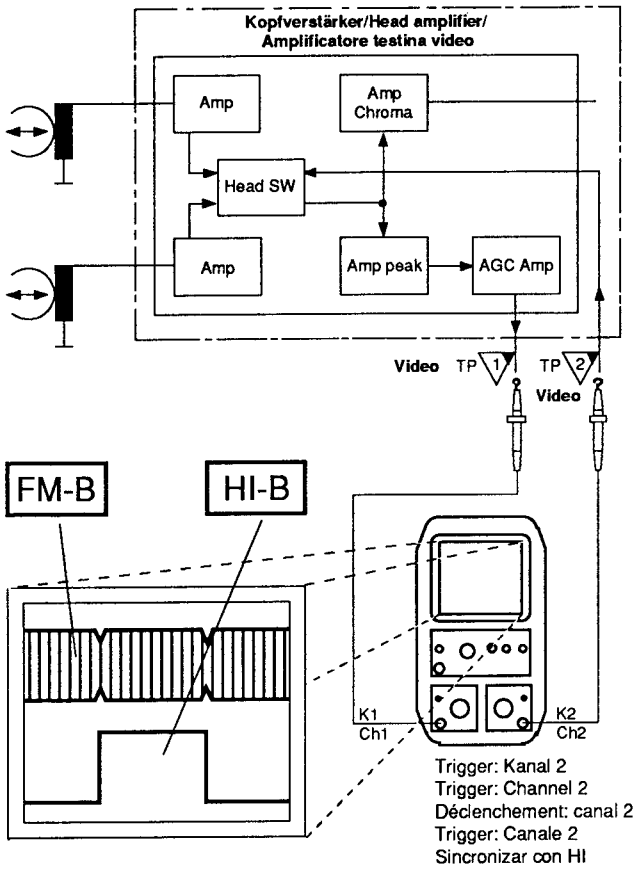


Fig. 37

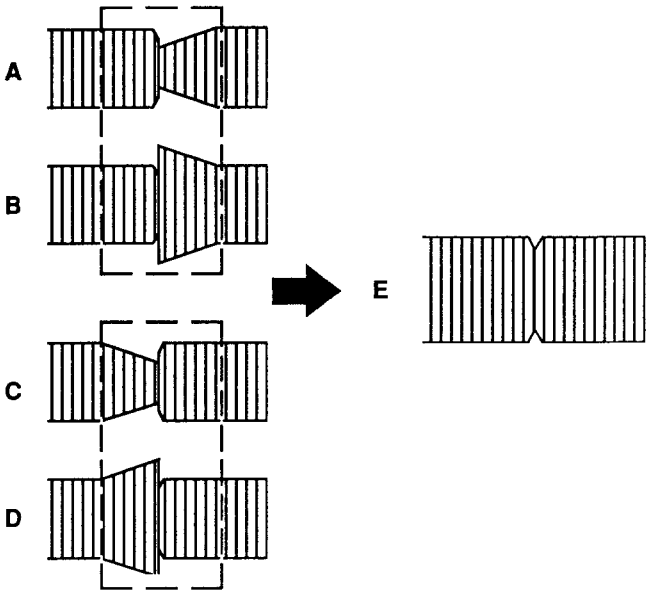


Fig. 38

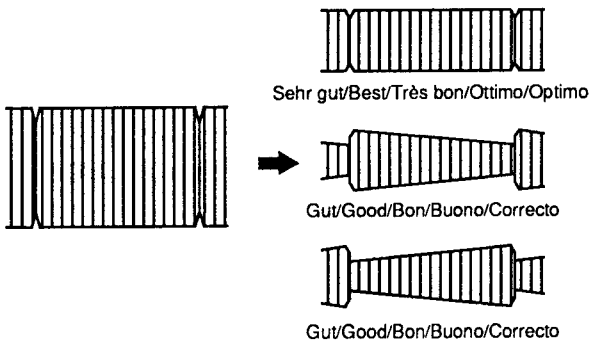


Fig. 39

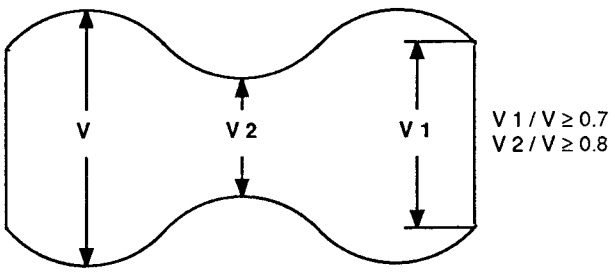


Fig. 40

6.8.2 Einstellen der Neigung des A/C-Kopfes

- Unbespielte Cassette vom Bandanfang an wiedergeben.
- Neigung des A/C-Kopfes (34) mit Schraube "A1" (Fig. 41 / 42) so einstellen, daß das Band bei manueller Bandzugerhöhung leicht sichtbar, jedoch ohne zu bördeln am unteren Führungsbund des Bandlaufbolzens P4 aufliegt.
- Höheneinstellung des A/C-Kopfes prüfen (Kap. 6.8.3)

6.8.2 Tilt Adjustment of the A/C Head

- Playback an un-used cassette from the beginning.
- Adjust the tilt of the A/C head (34) with the screw "A1" (Fig. 41 / 42) so that the tape, whilst manually increasing the tape tension, just touches the lower collar of the Tape Guide Bolt P4 without crinkling.
- Check the height adjustment of the A/C Head (para 6.8.3)

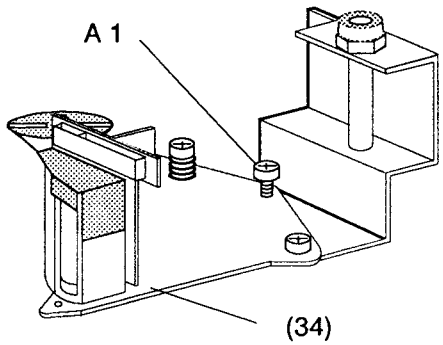


Fig. 41

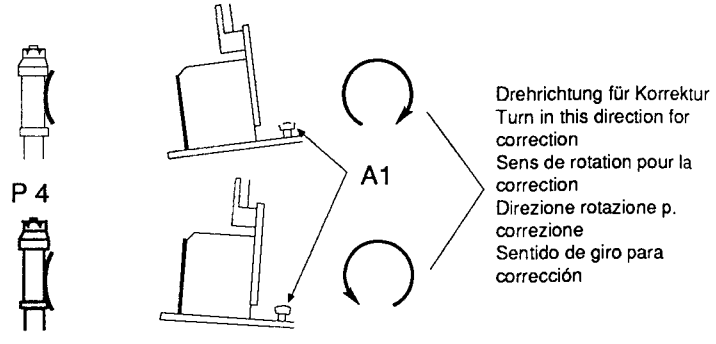


Fig. 42

6.8.3 Höheneinstellung des A/C-Kopfes

Meßmittel: Testcassette, Oszilloskop
- Testcassette wiedergeben
- mit Mutter (35) den unteren Rand des Synchronkopfes mit dem unteren Rand des Bandes zur Deckung bringen (Fig. 43).

Kontrolle:
- Tastkopf des Oszilloskops an EURO-AV-Buchse, Kontakt 1
- 6,3 kHz- Signal der Testcassette wiedergeben
- mit Mutter (35) maximale Ausgangsspannung einstellen (Fig. 44).

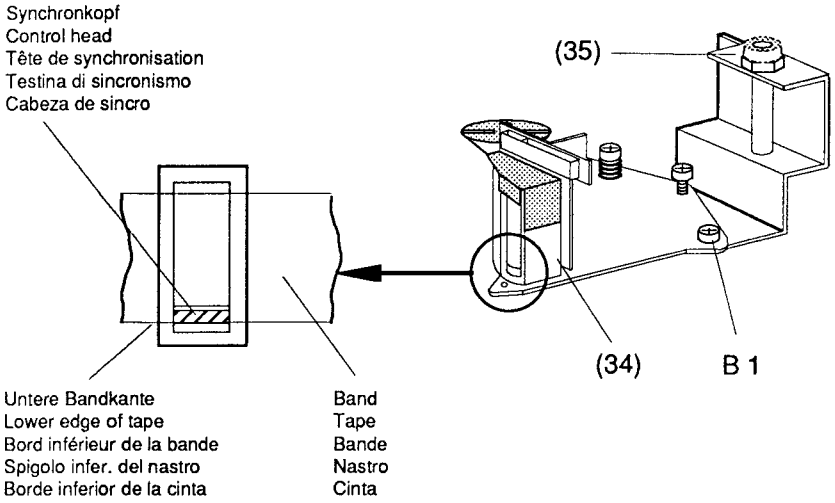


Fig. 43

6.8.3 Height adjustment of the A/C Head

Service Aids: Test Cassette, Oscilloscope
- Playback the Test Cassette.
- Turn the nut (35) so that the bottom edge of the Sync Head coincides with the lower edge of the tape (Fig. 43).

CHECK:
- Connect a test probe from the Oscilloscope to contact 1 of the EURO-AV Socket.
- Playback the 6.3 kHz signal from the Test Cassette.
- Adjust the nut (35) to obtain maximum output voltage (Fig. 44).

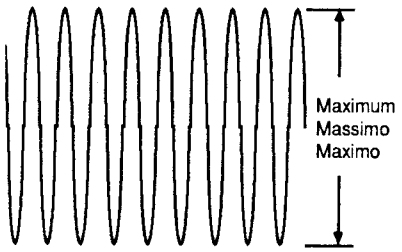


Fig. 44

6.8.4 Azimuteintellung des A/C-Kopfes

Meßmittel: Testcassette, Oszilloskop
- Tastkopf des Oszilloskops an EURO-AV-Buchse, Kontakt 1.
- 6,3 kHz-Audiosignal der Testcassette wiedergeben.
- mit Schraube "B1" maximalen Ausgangspegel einstellen (Fig. 43, Fig. 44).

6.8.5 Einstellen der horizontalen Lage des A/C-Kopfes

Meßmittel: Testcassette, Oszilloskop
- Oszilloskop nach Abbildung Fig. 37 anschließen
- Testcassette wiedergeben (Tracking in Mittelstellung)
- Hüllkurve (FM vom Band) mit Mutter (36) auf maximale Amplitude einstellen (Fig. 45, Fig. 46).

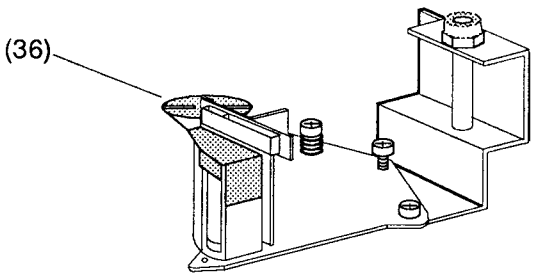


Fig. 45

6.8.4 Azimuth adjustment of the A/C Head

Service Aids: Test Cassette, Oscilloscope
- Connect a test probe from the Oscilloscope to contact 1 of the EURO-AV Socket.
- Playback the 6.3 kHz signal from the Test Cassette.
- Adjust the screw "B1" to obtain maximum output voltage (Fig. 43, Fig. 44).

6.8.5 Horizontal position adjustment of the A/C Head

Service Aids: Test Cassette, Oscilloscope
- Connect the Oscilloscope as shown in Fig. 37.
- Playback the Test Cassette (tracking to mid setting).
- Set the envelopes (FM Tape) to maximum amplitude (Fig. 45, Fig. 46) with the nut (36).

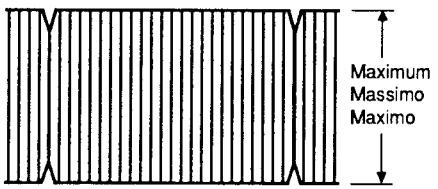


Fig. 46

7. Hinweise zu Reparaturen in der Antriebsmechanik

Dieses Laufwerk ist durch den Funktionswahlschalter (55) sehr eng mit der Ablaufsteuerung verknüpft. Die Beziehung zwischen Funktionswahlschalter und den Kurvenrädern bestimmt alle weiteren mechanischen Funktionsabläufe. Falls Hebel, Zahnräder, Rollen usw. nicht exakt eingebaut sind, können deshalb Laufwerksblockaden, bzw. Schäden im Laufwerk oder in der Elektronik auftreten.

Die Abbildungen Fig. 47 / 48 zeigen das Laufwerk in der Bezugsposition "STOP" und die dabei auftretende Anordnung der Markierungslöcher. Die Bezugsposition "STOP" ist identisch mit der Laufwerkstellung "Umspulbetrieb". Diese entspricht der 2. Raststellung des Kupplungsrades (116), wenn diese Laufwerkstellung durch Drehen des Capstanrotors von Hand angefahren wird.

Der Austausch von Bauteilen in der Antriebsmechanik darf nur in dieser Laufwerkstellung erfolgen.

7. Notes on Repairing the Drive Mechanism

This Drive Mechanism is very closely coupled with the Sequence Control by means of the Mode Select Switch (56). The relationship between the Mode Select Switch and the Cam Gears determines all the sequences of the other mechanical operations. If, therefore, the levers, gears and rollers etc, are not correctly fitted, the drive mechanism may fail to work and damage may occur within the mechanics or electronic circuits.

The illustrations Fig. 47 / 48 show the drive mechanism in the reference position "STOP" and the resulting alignment of the marking holes. The reference position "STOP" is identical to the mechanical position during "WINDING MODE". This corresponds to the second locking position of the clutch disc (116), when this mechanical position is reached by rotating the capstan rotor by hand.

Replacement of components in the drive mechanism must only be carried out with the mechanics set to this position.

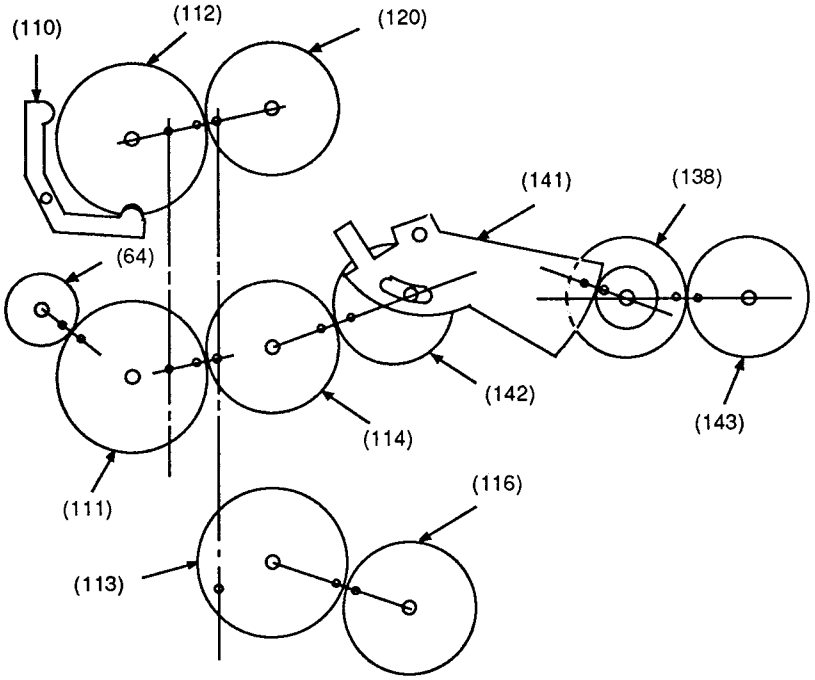


Fig. 47

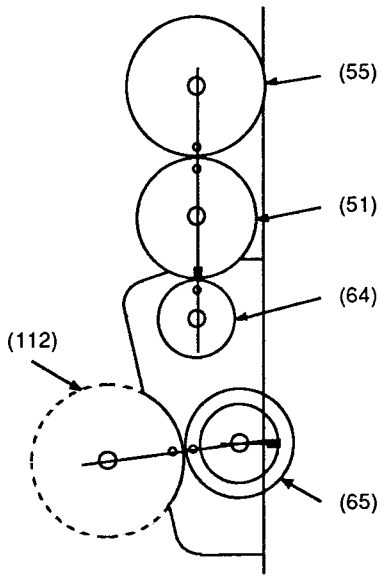


Fig. 48

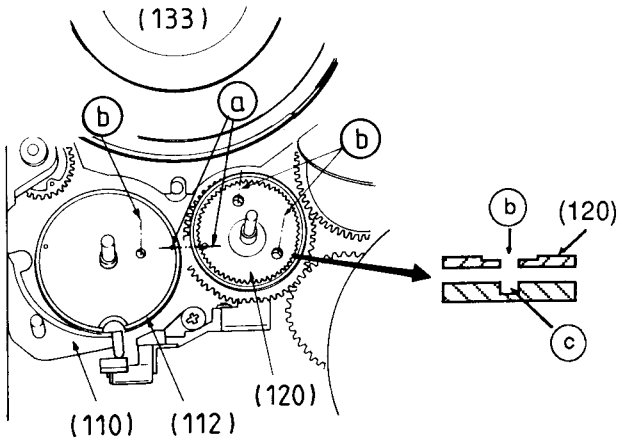


Fig. 49

7.1 Kurvenrad (112), Ringrad (120), Sperrhebel (110)

- Ringrad (120) so einbauen, daß die Markierungslöcher (b) im Ringrad mit den Markierungslöchern (c) im Laufwerkchassis übereinstimmen (Fig. 49).
- Kurvenrad (112) so einbauen, daß das Markierungsloch (b) mit dem Markierungsloch (c) im Laufwerk übereinstimmt und das Markierungsloch (a) dem Markierungsloch (a) des Ringrades (120) gegenübersteht.
- Sperrhebel (110) einsetzen.

7.2 Kurvenrad (111), Untersetzungszahnrad (64)

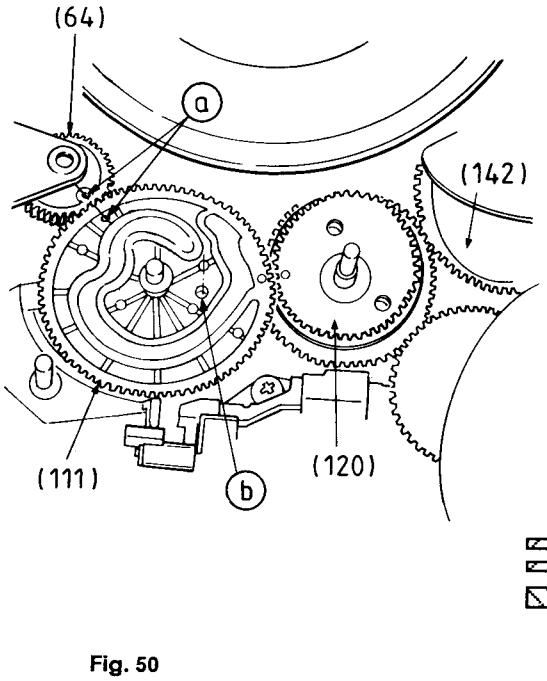
- Untersetzungszahnrad (64) von der Oberseite des Laufwerks einsetzen (Fig. 50).
- Kurvenrad (111) so auf das Kurvenrad (112) stecken, daß sich die Markierungslöcher (a) des Kurvenrades (111) und des Untersetzungszahnrads (64) gegenüberstehen. Gleichzeitig müssen die Markierungslöcher (b) der Kurvenräder (111) und (112) genau übereinander liegen (Fig. 49 / 50).

7.1 Sub Cam Gear (112), Ring Gear (120), Locking Lever (110)

- Fit the ring gear (120) so that the marked holes (b) in the Ring Gear lines up with the marked holes (c) in the mechanical chassis (Fig. 49).
- Fit the Sub Cam Gear (112) so that the marked hole (b) lines up with the marked hole (c) in the mechanics and that the marked hole (a) faces towards the marked hole (a) on the Ring Gear (120).
- Fit the Locking Lever (110).

7.2 Cam Gear (111), Reduction Toothed Gear (64)

- Fit the Reduction Toothed Gear (64) from the top of the mechanics (Fig. 50)
- Fit the Cam Gear (111) onto the Sub Cam Gear (112) so that the marked holes (a) on the Cam Gear (110) and the Reduction Gear (64) are aligned towards each other. In this position the marked holes (b) on the Cam Gears (111) and (112) must lie accuratly over each other (Fig. 49 / 50).



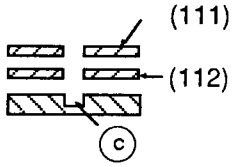


Fig. 50

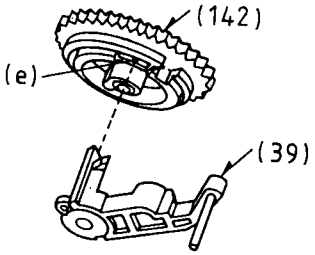


Fig. 51

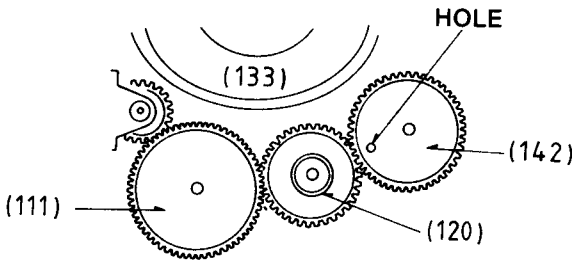


Fig. 51-1

7.3 Ladekurvenrad (142), Zwischenrad (114)

- Ladekurvenrad (142) so einbauen, daß der Hilfsladehebel (39) in die Aussparung "e" eingreift (Fig. 51).
- Zwischenrad (114) auf das Ringrad (120) stecken (Fig. 52). Die Markierungslöcher des Zwischenrades (114) und des Kurvenrades (111), sowie die Markierungslöcher (b) des Zwischenrades (114) und des Ladekurvenrades (142) müssen gegenüberstehen. Gleichzeitig müssen das Markierungsloch (b') des Zwischenrades (114), das Markierungsloch (b) des Ringrades (120) und das Markierungsloch (c) im Laufwerkchassis übereinanderliegen.

7.4 Steuerrad (113)

- Steuerrad (113) so auf das Zwischenrad (114) stecken, daß das Markierungsloch (a) des Steuerrades (113) dem Markierungsloch (a) des Kupplungsrades (116) gegenübersteht und die Markierungslöcher (b) des Steuerrades (113), (b') des Zwischenrades (114), (b) des Ringrades (120) und (c) des Laufwerks übereinanderliegen (Fig. 53).
- Sicherungsring (100) montieren.

7.5 Hauptsteuerschieber (103), Steuerhebel (109)

- Hauptsteuerschieber (103) einsetzen und mit den Sicherungsringen (100) befestigen (Fig. 54).
- Steuerhebel (109) so einbauen, daß dessen Steuerbolzen " f " in die Steuerkurve des Kurvenrades (111) und der Abbug in die Aussparung des Hauptsteuerschiebers (103) eingreift (Fig. 55).
- Greifring " X " montieren.

7.3 Loading Cam Gear (142), Intermediate Gear (114)

- Fit the Loading Cam Gear (142) so that the Sub Loading Lever (39) engages with the cut out "e" (Fig. 51).
- Fit the Intermediate gear (114) onto the Ring Gear (120), (Fig. 52). The marked holes (a) on the Intermediate Gear (114) and the Cam Gear (111) and the marked the holes (b) on the Intermediate Gear (114) and the Loading Cam Gear (142) must be aligned towards each other. Simultaneously the marked hole (b') on the Intermediate Gear (114), the marked hole (b) on the Ring Gear (120) and the marked hole (c) on the mechanical chassis must lie accurately over each other.

7.4 Drive Gear (113)

- Fit the Drive Gear (113) onto the Intermediate Gear (114) so that the marked hole (a) on the Drive Gear (113) is aligned towards the marked hole (a) on the Clutch Disk (116), and the marked holes (b) on the Drive Gear (113), marked hole (b') on the Intermediate Gear (114),marked hole (b) on the Ring Gear (120) and the marked hole (c) on the mechanics lie accurately over each other (Fig. 53).
- Fit the Securing Ring (100).

7.5 Main Control Lever (103), Control Lever (109)

- Fit the Main Control Lever (103) and secure with the securing ring (100) (Fig. 54)
- Fit the Control Lever (109) so that the Drive Bolt " f " engages with the cam curve of the Cam Gear (111) and the bent part with the gap in the main control lever (103), Fig. 55.
- Fit the Grip Ring "X".

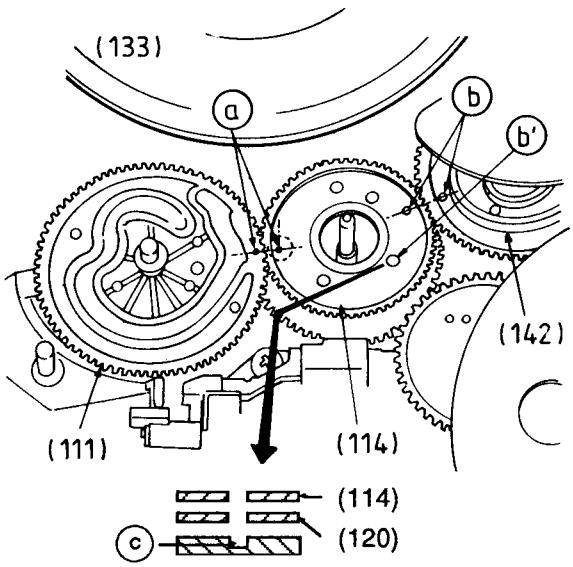


Fig. 52

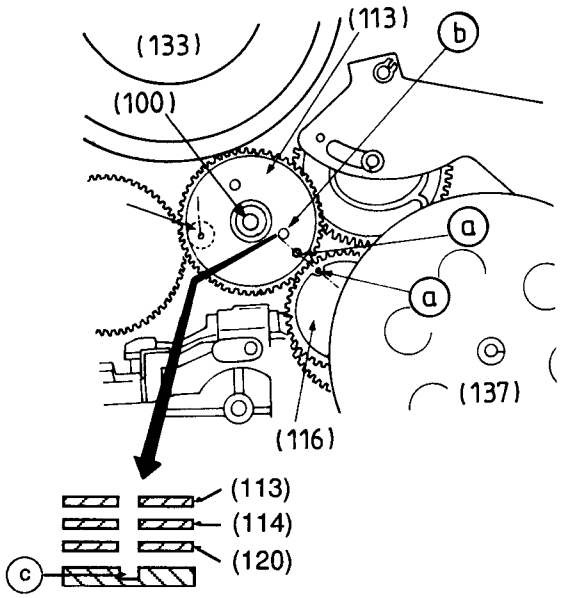


Fig. 53

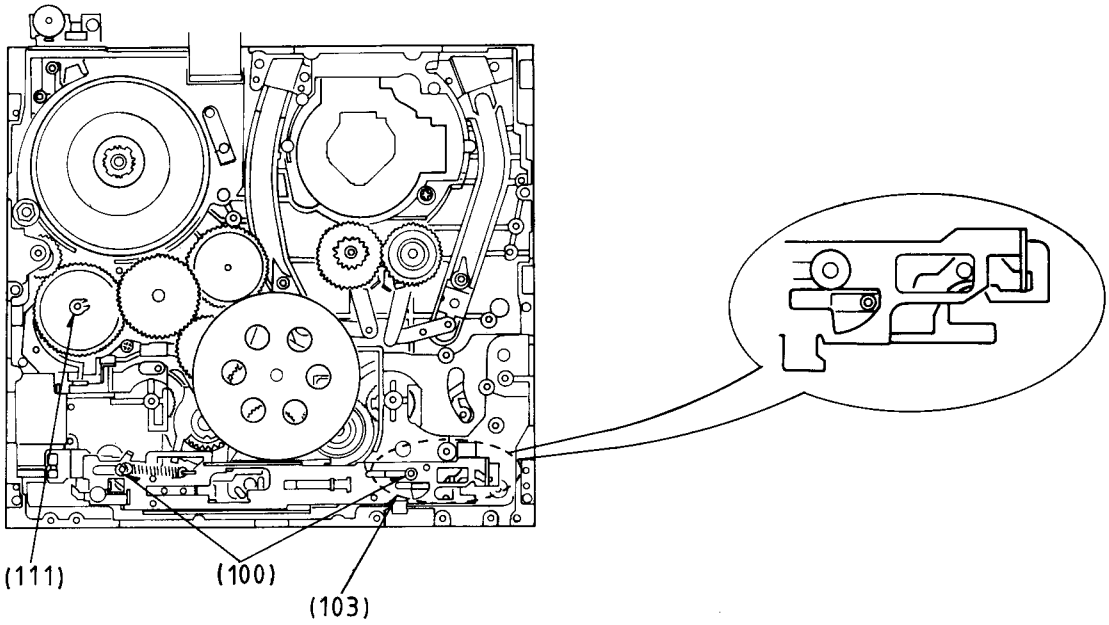


Fig. 54

7.6 Laderäder (138,143), Zahnsegment (141), Bremshebel (105), Spannrollenhebel (108)

- Bandführungsbolzen P2, P3 in Stellung "STOP" bringen.
- Laderäder (138, 143) so einsetzen, daß sich deren Markierungslöcher (b) gegenüberstehen (Fig. 56).
- Zahnsegment (141) nach Fig. 56 einbauen. Das Markierungsloch (b) des Zahnsegments (141) muß sich gegenüber der Markierungsnase (d) des Laderades (138) befinden.
- Bremshebel (105) und Greifring "X" montieren.
- Spannrollenhebel (108) einbauen.
- Spannung des Riemens des Capstanmotors einstellen (Kap. 6.1)
- Schrauben "SC" anziehen.

7.6 Loading Gears (138,143), Toothed Segment (141), Brake Lever (105), Tension Roller Lever (108)

- Set the Tape Guide Bolts P2 and P3 into the "STOP" position.
- Fit the Loading Gears (138, 143) so that their marked holes (b) are aligned towards each other (Fig. 56).
- Fit the Toothed Segment (141) as shown in Fig. 56. The marked hole (b) on the Toothed Segment (141) must be aligned towards the marked lug (d) on the Loading Gear (138).
- Fit the Brake Lever (105) and the Grip Ring "X".
- Fit the Tension Roller Lever (108).
- Adjust the tension of the belt of the capstan motor (para 6.1).
- Tighten the screws "SC".

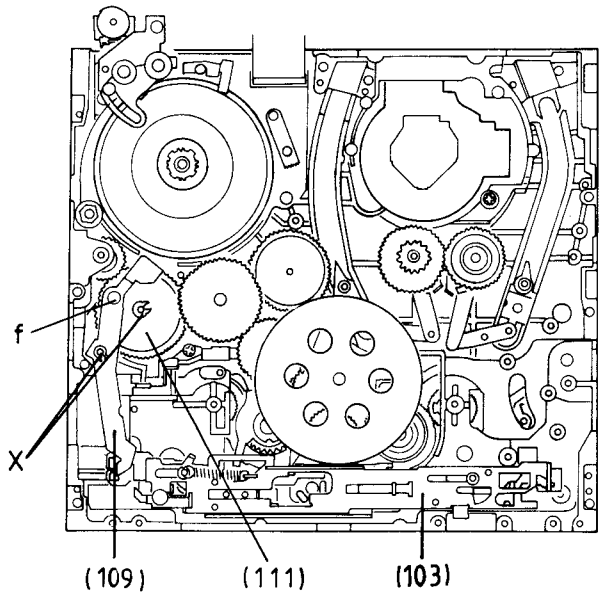


Fig. 55

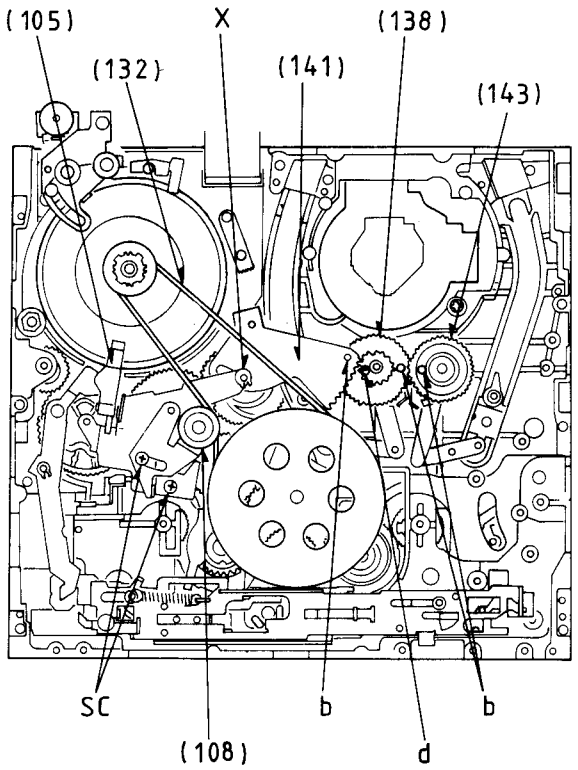


Fig. 56

7.7 Umspulhebel (153), Umspulkupplung (151), Zugverminderungshebel (154), Zugverminderungs-Kupplung (152)

- Umspulhebel (153) und Umspulkupplung (151) montieren (Fig. 57).
- Umspulriemen (159) auf die Umspulkupplung (151) legen.
- Zugverminderungshebel (154) und Zugverminderungs-Kupplung (152) einbauen.

7.7 Rev Arm Unit (153), Rev Clutch Unit (151), Tension Release Lever (154), Tension Release Clutch Unit (152)

- Fit the Rev Arm Unit (153) and the Rev Clutch Unit (151), Fig. 57.
- Put the Rev Motor Timing Belt (159) onto the Rev Clutch Unit (151).
- Fit the Tension Release Lever (154) and Tension Release Clutch Unit (152).

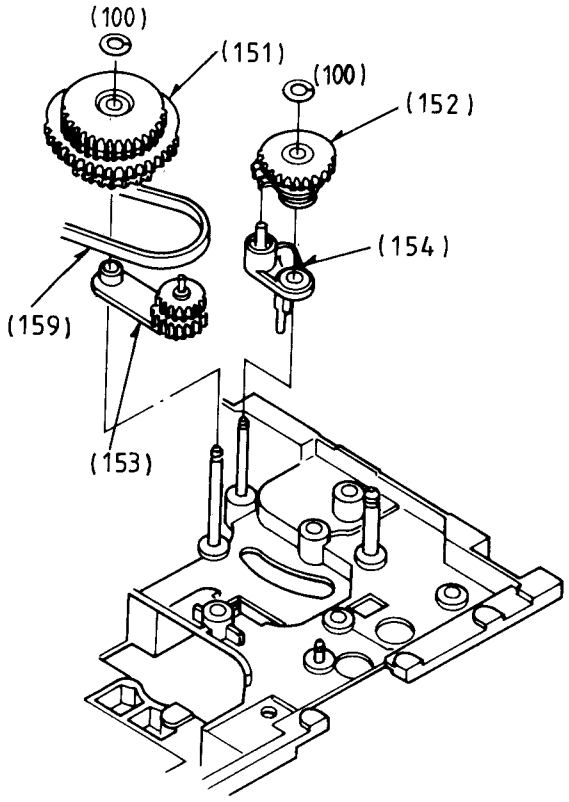


Fig. 57

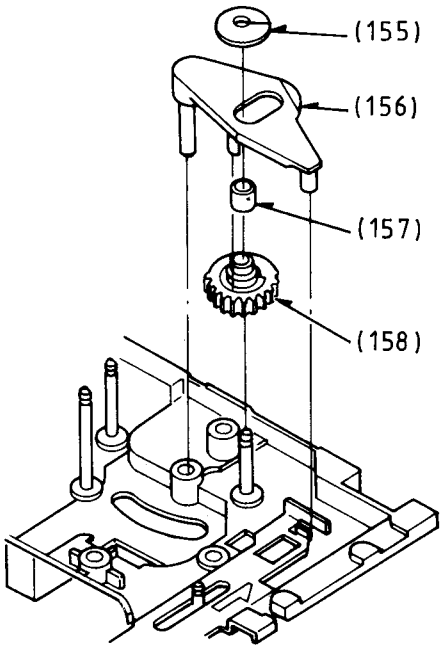


Fig. 58

7.8 Hilfshebelrad (158), Hilfshebel (156), Umspulkontrollhebel (160)

- Hilfshebelrad (158), Hilfshebel (156), Bremsring (157) und Scheibe (155) gemäß Fig. 58 montieren.
- Umspulkontrollhebel (160) gemäß Fig. 59 einbauen.

7.9 Riemenspannhebel (93)

- Riemenspannhebel (93) gemäß Fig. 60 montieren.
- Riemenspannung, wie in Kapitel 6.2 beschrieben, einstellen.

7.8 Sub Lever Cam (158), Sub Cam Follower (156), Review Control Lever (160)

- Fit the Sub Lever Cam (158), the Sub Cam Follower (156), the Rubber Stopper (157) and the Washer (155) as shown in Fig. 58.
- Fit the Review Control Lever (160) as shown in Fig. 59.

7.9 Tension Pulley Base Unit (93)

- Fit the Tension Pulley Base Unit (93) as shown in Fig. 60.
- Adjust the tension of the Timing Belt as described under point 6.2.

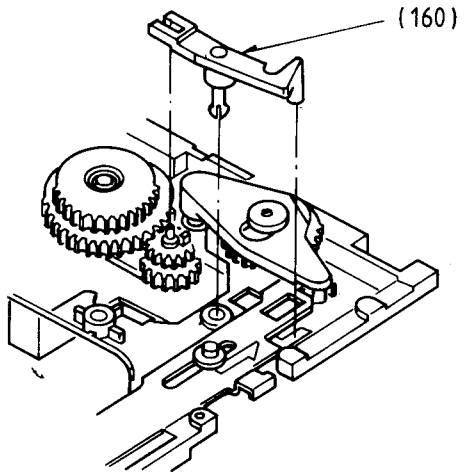


Fig. 59

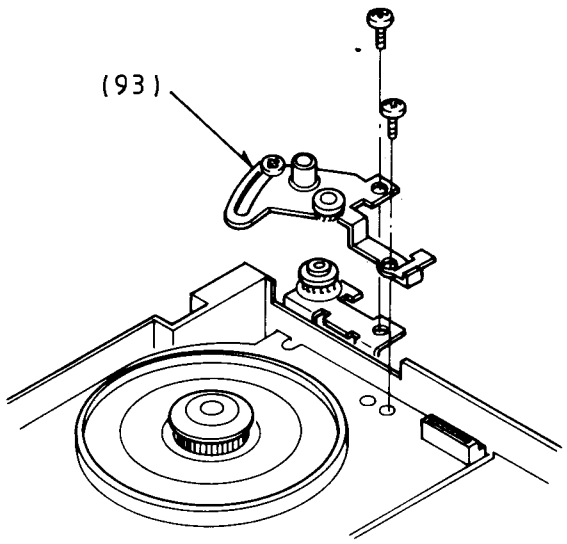


Fig. 60

7.10 Zwischenrad (65)

Hinweis: Bevor Sie das Zwischenrad einbauen, müssen sich alle Zahnräder in den bisher beschriebenen Positionen befinden.

- Zwischenrad (65) gemäß Abbildung Fig. 61 einsetzen. Die Markierungslöcher (a) des Zwischenrades (65) und des Kurvenrades (112) müssen sich gegenüberstehen.

7.10 Intermediate Gear (65)

Note: Before fitting the Intermediate Gear make sure that all other gears are in the positions described earlier.

- Fit the Intermediate Gear (65) as shown in Fig. 61. The marked holes (a) on the Intermediate Gear (65) and the Cam gear (112) must be aligned towards each other.

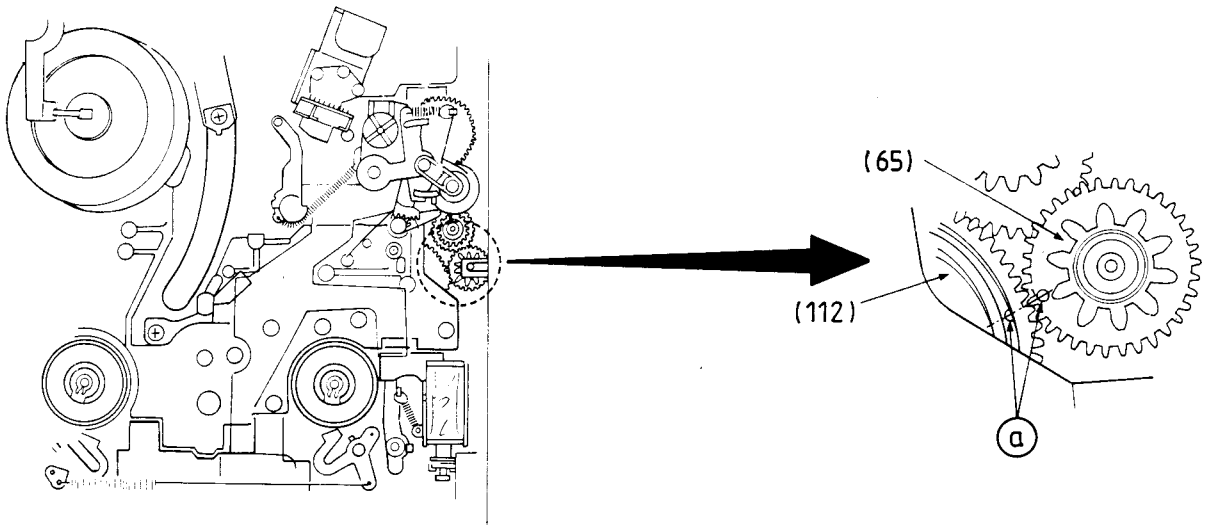


Fig. 61

7.11 Funktionswahlschalter (55), P5-Zahnsegment (50)

- Funktionswahlschalter (55) einsetzen, Schraube "g" eindrehen und Kontakte "h" anlöten (Fig. 62).
- P5-Zahnsegment (50) nach Abbildung Fig. 62 einsetzen. Das Markierungsloch (a) des P5-Zahnsegments (50) muß dem 1. Zahn des Zahnsegments des P5-Hebels (53) gegenüberstehen.

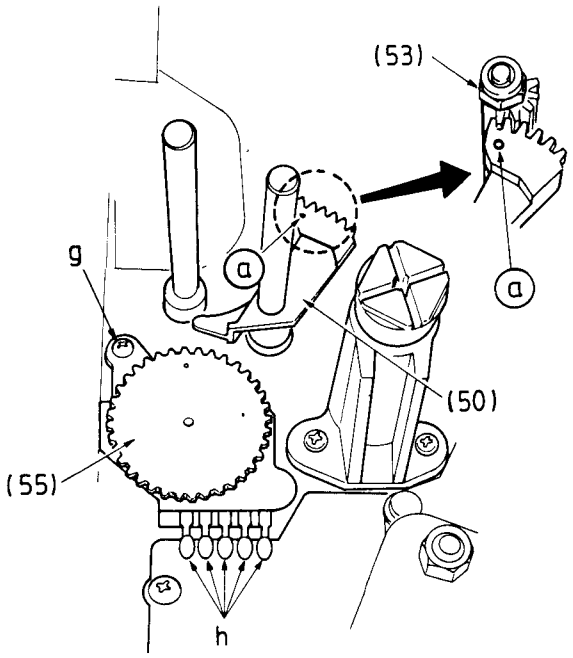


Fig. 62

7.11 Mode Select Switch (55), P5 Toothed Segment (50)

- Fit the mode select switch (55), tighten the screw "g" and solder the contacts "h" (Fig. 62).
- Fit the P5 Toothed Segment (50) as shown in Fig. 62. The marked hole (a) on the P5 Toothed Segment (50) must be aligned towards the first tooth of the Tooth Segment on the P5 Lever (53).

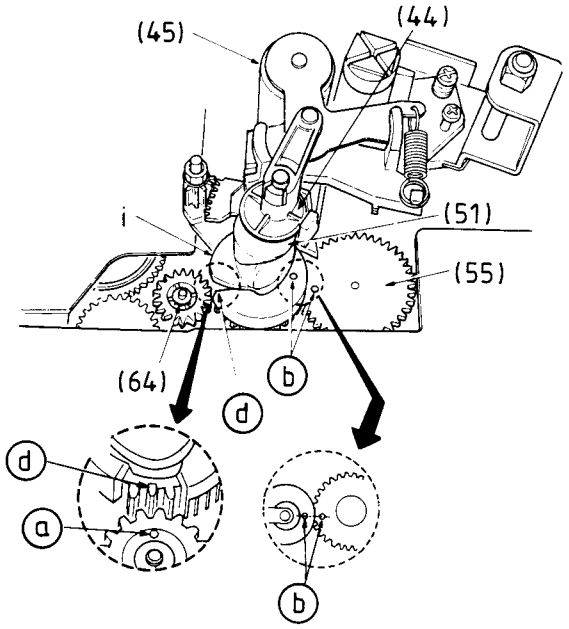


Fig. 63

7.12 Rollenhebelantrieb (51), Andruckrolleneinheit (45)

- Rollenhebelantrieb (51) so einsetzen, daß die Ecke " i " des P5-Hebels (53) in der Aussparung des Rollenhebelantriebs liegt (Fig. 63). Die Markierungsnase (d) am Zahnrad des Rollenhebelantriebs und das Markierungsloch (a) des Untersetzungszahnrads (64) müssen gegenüberstehen. Außerdem müssen die Markierungslöcher (b) des Funktionswahlschalters (55) und des Zahnrades des Rollenhebelantriebs (51) gegenüberstehen.
- Andruckrolleneinheit (45) und Sicherungskappe (44) einbauen.

7.12 Roller Lever Drive (51), Pressure Roller Assembly (45)

- Fit the Roller Lever Drive (51), so that the corner " i " of the P5 Lever (53) lies in the cut out on the Roller Lever Drive (Fig.63). The marked nose (d) on the toothed gear of the Roller Lever Drive and the marked hole (a) on the Reduction Toothed Gear (64) must be aligned towards each other. In addition, the marked holes (b) on the Mode Select Switch (55) and on the tooth gear of the Roller Lever Drive (51) must be aligned towards each other.
- Fit the Pressure Roller Assembly (45) and the Securing Cap (44).

8. Allgemeine Hinweise

- Die in Klammern angegebenen Zahlen sind mit den Positionsnummern in den Explosionszeichnungen und Ersatzteillisten identisch.
- Justagemarkierungen:

(a) kleine Markierungslöcher
(b) große Markierungslöcher
(c) Bezugsmarkierung im Laufwerk
(d) Markierungsnasen

Testcassette **Sach-Nr. 9.27540 - 1011**
- Farbtestbild mit Dropout-Einblendung
- 6,3 kHz- Senkrecht-Vollspuraufzeichnung und Bezugspegel 333 Hz in dreiminütigem Wechsel.

Testcassette (HiFi) **Sach-Nr. 9.27540 - 1016**
- Farbtestbild mit Dropout-Einblendung
- Längsspur - Ton: 6,3 kHz / 333 Hz
- FM-Ton: 1 kHz Vollpegel (± 50 kHz Hub)

Ersatzteilliste

Die Ersatzteilliste für das Laufwerk ist im Service Manual des betreffenden Videorecorders enthalten!

8. General Notes

- The numbers quoted in brackets are the same as the position numbers given in the Exploded Diagrams and Spare Parts Lists.
- Alignment marks:

(a) Small marked holes
(b) Large marked holes
(c) Reference mark in the mechanics
(d) Marked lugs

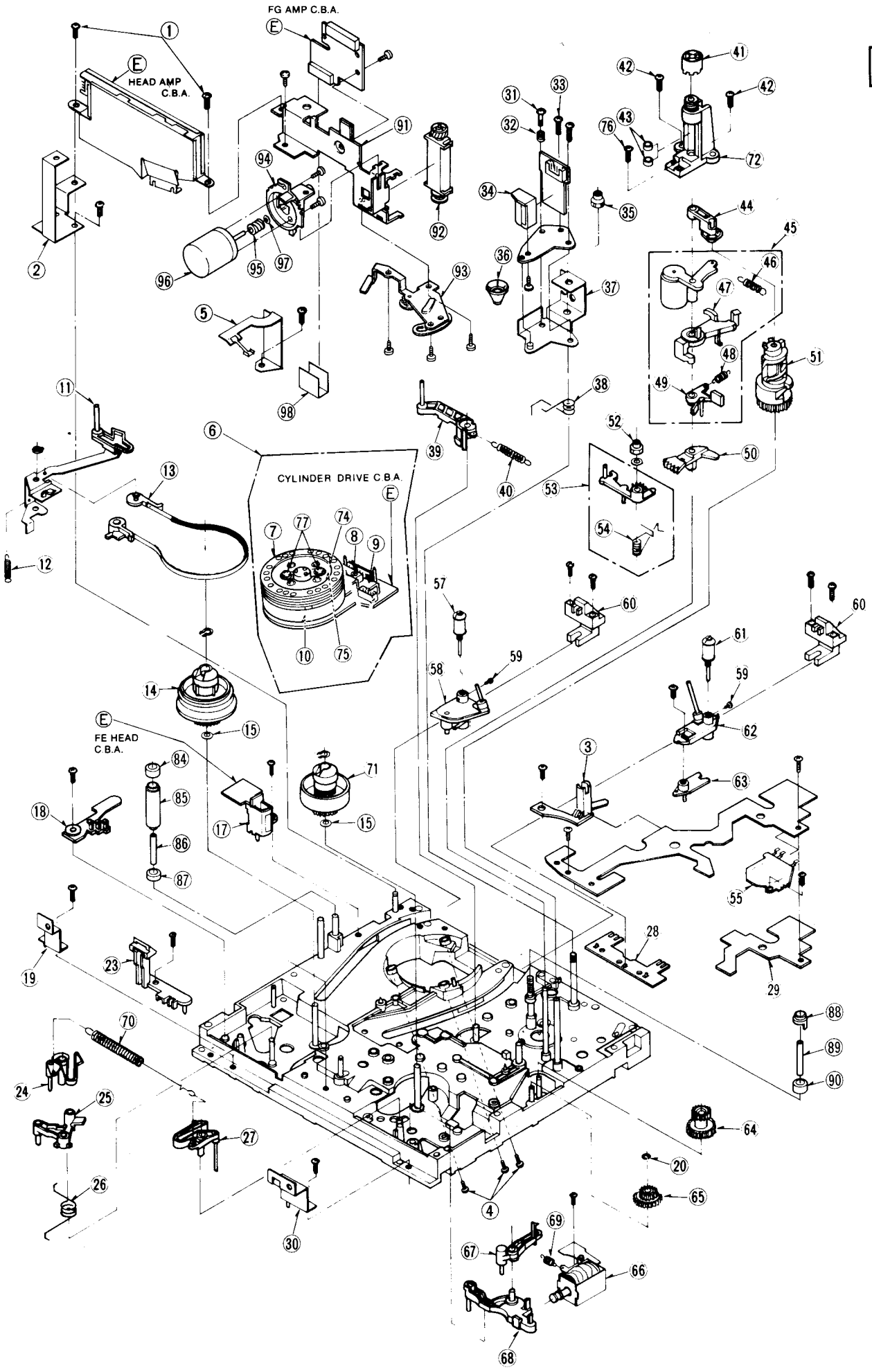
Test cassette **Part no. 9.27540 - 1011**
- Colour test pattern with dropout recording
- 6.3 kHz vertical full-track recording alternating with 333 Hz reference level every 3 minutes.

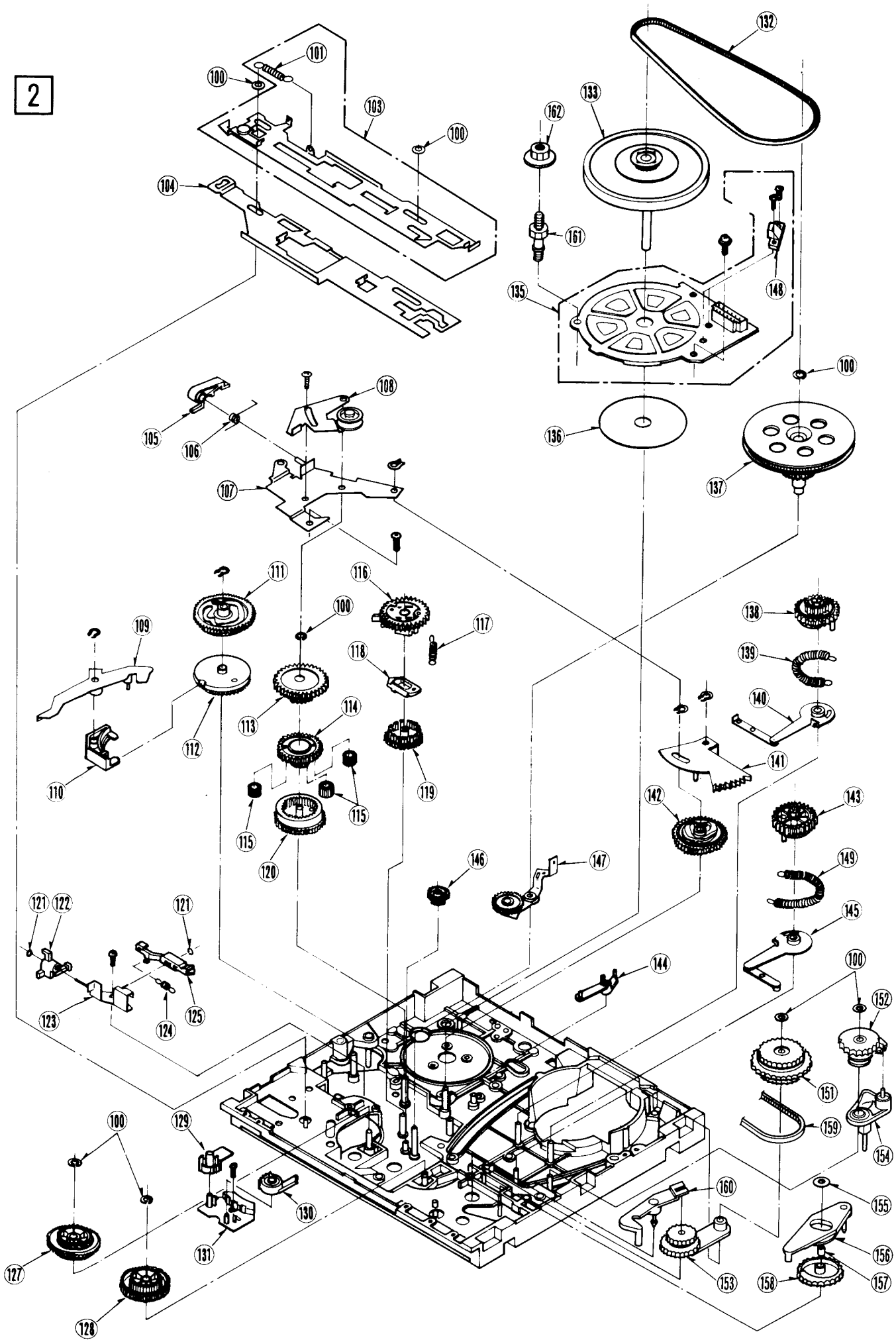
Test cassette (HiFi) **Part no. 9.27540 - 1016**
- Colour test pattern with dropout recording
- Longitudinal track sound: 6.3 kHz / 333 Hz
- FM sound: 1 kHz full level (± 50 kHz deviation)

Spare parts list

The Service Manual of the video recorder referred to contains the spare parts list of the drive mechanism!

Explosionszeichnungen Exploded views

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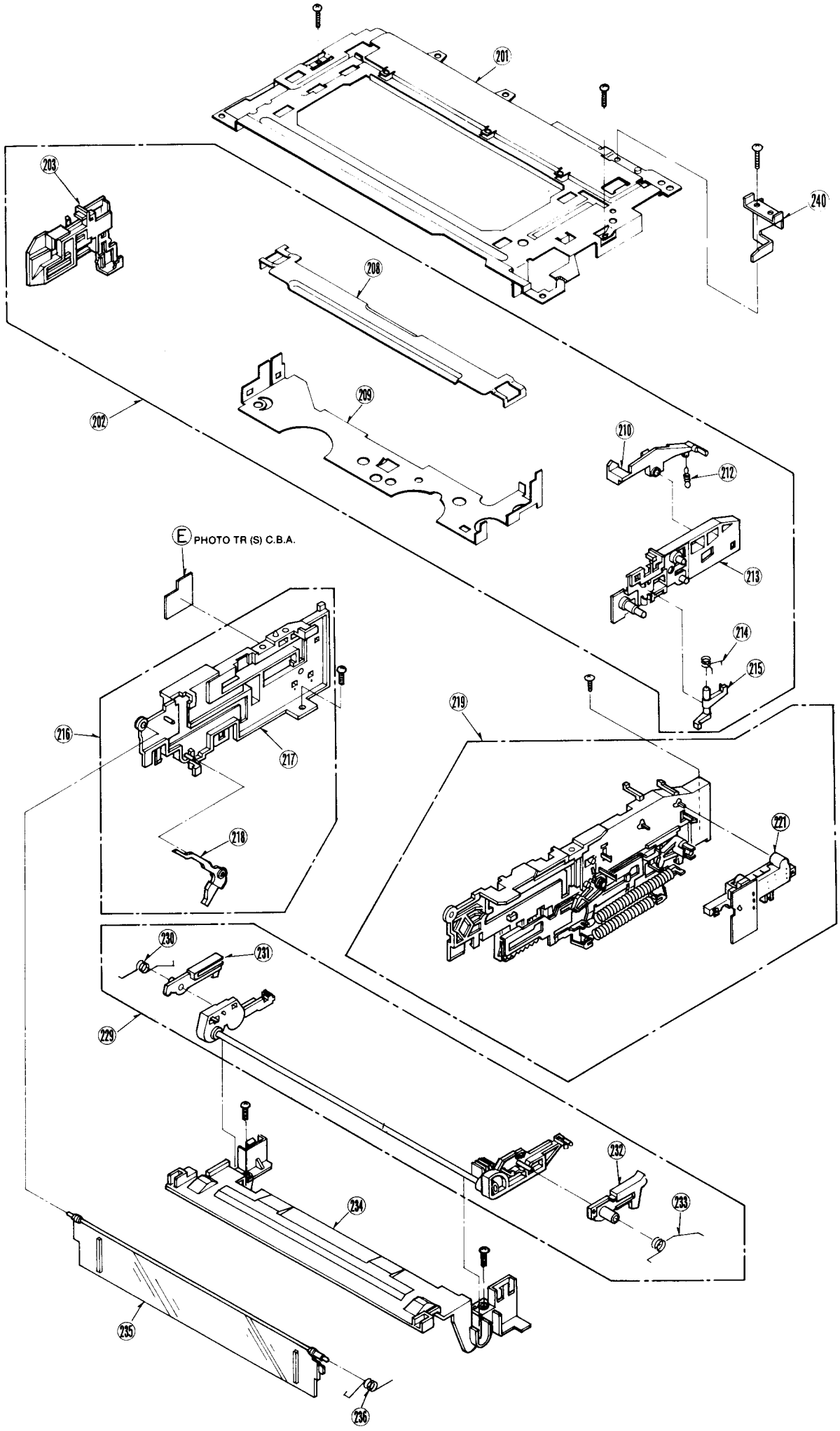
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